KENWOOD

DNN991HD
DNN9710BT

CONNECTED NAVIGATION SYSTEM
INSTRUCTION MANUAL

JVCKENWOOD Corporation

Before reading this manual, click the button below to check the latest edition and the modified pages.
http://manual.kenwood.com/edition/im383/

Check the latest edition

Take the time to read through this instruction manual.
Familiarity with installation and operation procedures will help you obtain the best performance from your new Navigation System.

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your Kenwood dealer for information or service on the product.

Model DNN991HD/ DNN9710BT Serial number _____

US Residence Only

Register Online

Register your Kenwood product at **www.Kenwoodusa.com**

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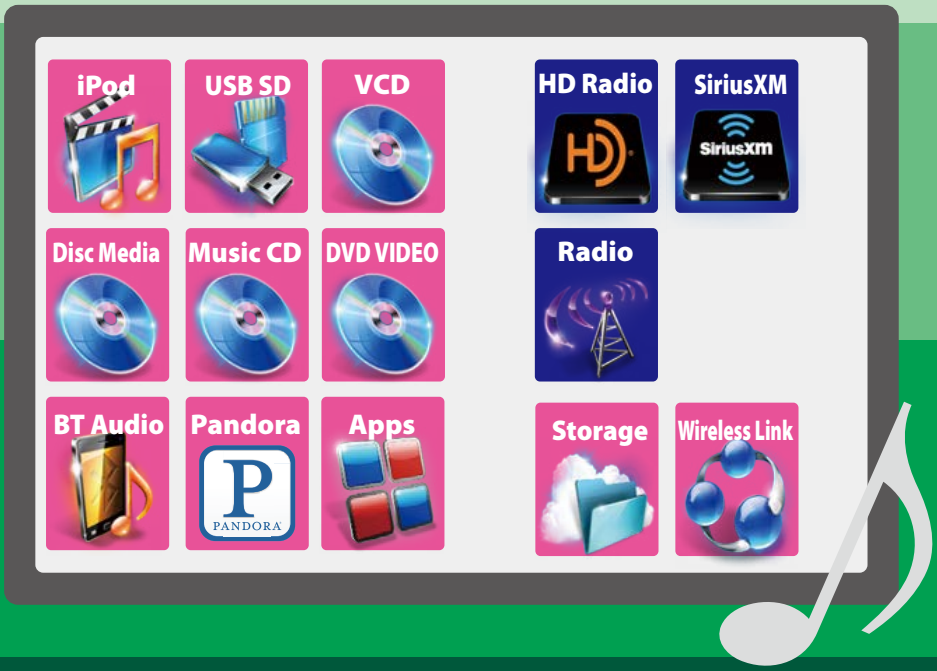
14DNN_IM383_Ref_K_en_00 (K/R)

What Do You Want To Do?

Thank you for purchasing the KENWOOD CONNECTED NAVIGATION SYSTEM.
In this manual, you will learn various convenient functions of the system.

Click the icon of the media you want to play.

With one-click, you can jump to the section of each media!



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Before Use

⚠ WARNING

To prevent injury or fire, take the following precautions:

- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit.
- Do not watch or fix your eyes on the unit's display when you are driving for any extended period.
- If you experience problems during installation, consult your Kenwood dealer.

Precautions on using this unit

- When you purchase optional accessories, check with your Kenwood dealer to make sure that they work with your model and in your area.
- You can select language to display menus, audio file tags, etc. See *Language setup (P.132)*.
- The Radio Data System or Radio Broadcast Data System feature won't work where the service is not supported by any broadcasting station.

Protecting the monitor

To protect the monitor from damage, do not operate the monitor using a ball point pen or similar tool with the sharp tip.

Cleaning the unit

If the faceplate of this unit is stained, wipe it with a dry soft cloth such as a silicon cloth. If the faceplate is stained badly, wipe the stain off with a cloth moistened with neutral cleaner, then wipe it again with a clean soft dry cloth.

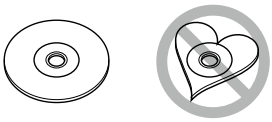
⚠
- Applying spray cleaner directly to the unit may affect its mechanical parts. Wiping the faceplate with a hard cloth or using a volatile liquid such as thinner or alcohol may scratch the surface or erase screened print.

Lens fogging

When you turn on the car heater in cold weather, dew or condensation may form on the lens in the disc player of the unit. Called lens fogging, this condensation on the lens may not allow discs to play. In such a situation, remove the disc and wait for the condensation to evaporate. If the unit still does not operate normally after a while, consult your Kenwood dealer.

Precautions on handling discs

- Do not touch the recording surface of the disc.
- Do not stick tape etc. on the disc, or use a disc with tape stuck on it.
- Do not use disc type accessories.
- Clean from the center of the disc and move outward.
- When removing discs from this unit, pull them out horizontally.
- If the disc center hole or outside rim has burrs, use the disc only after removing the burrs with a ballpoint pen etc.
- Discs that are not round cannot be used.



- 8-cm (3 inch) discs cannot be used.
- Discs with coloring on the recording surface or discs that are dirty cannot be used.
- This unit can only play the CDs with
  This unit may not correctly play discs which do not have the mark.
- You cannot play a disc that has not been finalized. (For the finalization process see your writing software, and your recorder instruction manual.)

Erase the personal information

Before giving or selling this unit to others, be sure to delete the information (mail, search logs, etc.) stored in this unit by yourself and confirm that the data has been deleted.

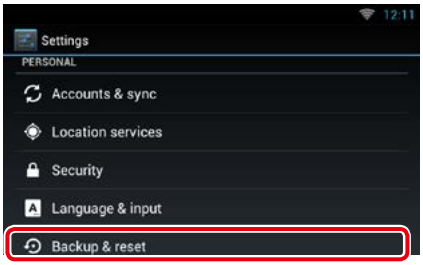
We shall not be liable for any damage caused by leakage of undeleted data.

1 **Press the <HOME> button.**

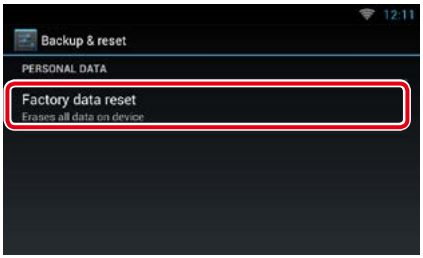
2 **Press the <MENU> button.**

3 **Touch [Setting].**

4 **Touch [Backup & Reset].**

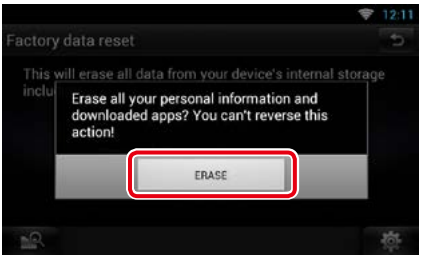


5 **Touch [Factory data reset].**



6 **Enter owner password. Touch [Rest].**

7 **Touch [ERASE].**


12:11
Factory data reset
This will erase all data from your device's internal storage
Erase all your personal information and downloaded apps? You can't reverse this action!
ERASE

How to Read this Manual

Search Operation

You can search music, video or picture files by the following operations.

NOTE

- If you use a remote controller, you can jump directly to the desired track/file with entering the track/folder/file number, play time, etc. For details, see *Direct search mode (P.155)*.

List search

You can search tracks, folders, and files according to hierarchy.

1 Touch illustrated area.
List Control screen appears.

2 Touch desired track/file.

Playback starts.

Other search

When you want to narrow the list down, there are other search ways.
This function is not available when music CD is the current source.

1 Touch [ ] in the control screen.
The search type screen appears.

2 Touch desired search way.

Link header
You can refer each section or top page with one-click.

Operation title
Introduces the function.

NOTE
Introduces some tips, notes, etc.

Reference mark
Displayed in blue notes.
With one-click, you can jump to the article related to the current section.

Operation procedure
Explains necessary procedures to achieve the operation.
< >: Indicates the name of panel buttons.
[ ]: Indicates the name of touch keys.

Screen shot
Shows some screen shots displayed during operation for reference.
The area or keys to touch are surrounded with a red frame.

NOTE

- The screens and panels shown in this manual are examples used to provide clear explanations of the operations.
  For this reason, they may be different from the actual screens or panels used, or some display patterns may be different.

Features of Connected systems

By connecting this unit to Internet, you can use various services.

Cooperation with Route Collector site

- Destinations and routes specified on the PC can be input to this navigation system.
- The routes you have traveled and the songs you have listened to can be logged. *(P.27)*
- By uploading music files to Dropbox and creating a play list on Route Collector site, you can listen to music anywhere through streaming without music files on this unit. *(P.88)*
- Speech to Text (STT) and Text to Speech (TTS).

Use of internet service

- Streaming service such as YouTube, Aupeo!, iHeartRadio*.
- Internet service such as email, Gmail, Google calendar, and social networking service such as Facebook and Twitter.
- Information (weather*, traffic*, RSS, etc.) service.

About the account

- To use internet services via this system, you need to create an account in the Route Collector site.
- In addition to the owner account, you can register up to four user accounts.
- You can use a guest account as well.
- By switching among accounts, you can secure the privacy when using the mail feature or social media.

For details, see *About Account (P.38)*.
http://www.route-collector.com/

Notes

You can use following feature for 2 years after registration of the owner account. To use it continuously, a usage fee is required. For details, see web site of Route Collector.
http://www.route-collector.com/

- Weather (by INRIX)*
- Traffic (by INRIX)*
- Dynamic Parking (by INRIX)*
- Fuel Prices (by INRIX)*
- Real-Time Traffic Camera (by INRIX)*
- Movie Show Times (by WWM)*
- TTS (by Nuance)
- STT (by Nuance)

To use the following services, you need to register the corresponding free or paid accounts.

- Aupeo!
- Facebook
- Twitter
- Gmail (by Google)
- Google calendar (by Google)
- Dropbox
- iHeartRadio*

* DNN991HD only

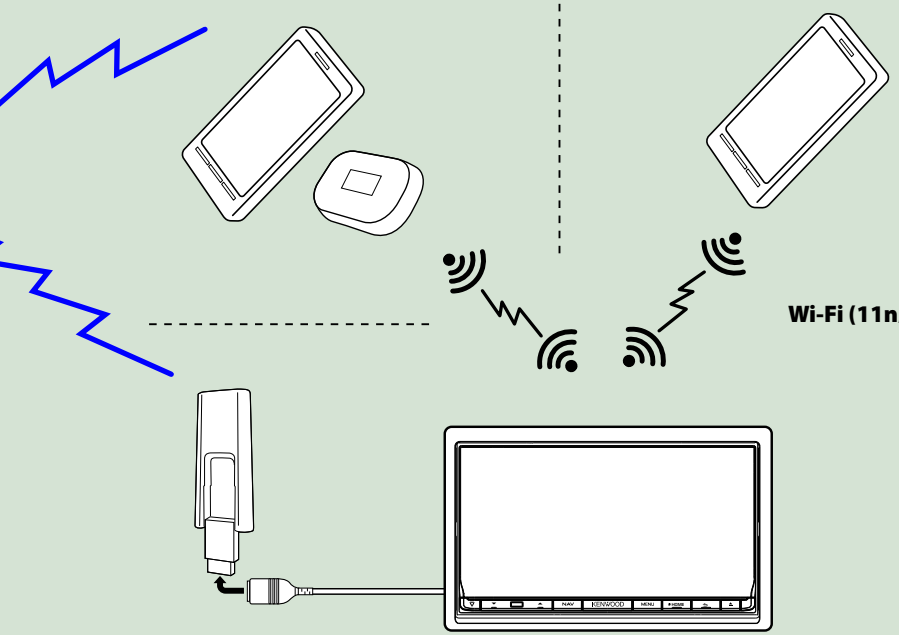
Wi-Fi access point

- Connect to Internet using the tethering function of your smartphone or an Internet device. *(P.32)*

Wi-Fi hotspot

- This unit becomes the Wi-Fi access point and you can enjoy music and video in a smartphone Wi-Fi connected by Kenwood Wireless Link. *(P.34)*

4G, LTE, 3G or EDGE



Wi-Fi (11n/g/b)

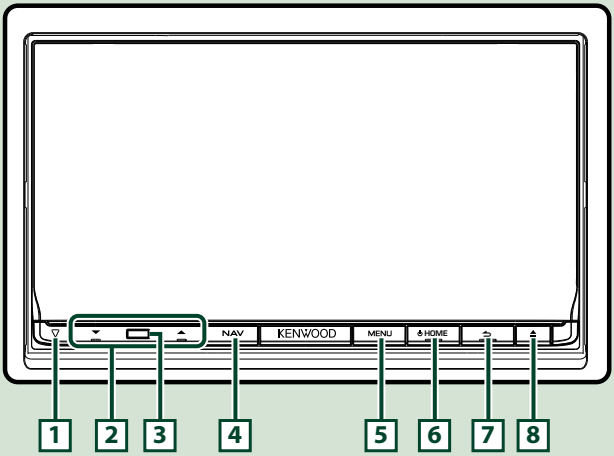
4G/ 3G Dongle (DNN991HD)

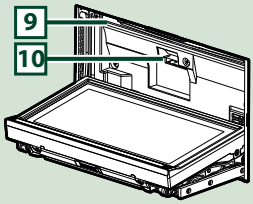
- Connect to the Internet directly with 4G/3G Dongle. The Internet device like smartphone is not necessary. *(P.35)*
- You can also connect to the Internet while using the Wi-Fi Hotspot mode.

- Media player for DVD video, CD, USB memory, SD card*, iPod, etc.
- HD Radio Technology and SiriusXM Satellite Radio. (DNN991HD)
- Radio
- Navigation

Basic Operations

Functions of the Buttons on the Front Panel





NOTE

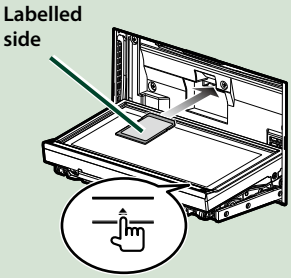
- The panels shown in this guide are examples used to provide clear explanations of the operations. For this reason, they may be different from the actual panels.

How to insert an SD Card

1) Press [8] <⏏> button for 1 second.
   The panel fully opens.
2) Hold the SD card as the illustration in the right and insert it into the slot until it clicks.

● **To eject the card:**

Push the card until it clicks and then remove your finger from the card.
The card pops up so that you can pull it out with your fingers.



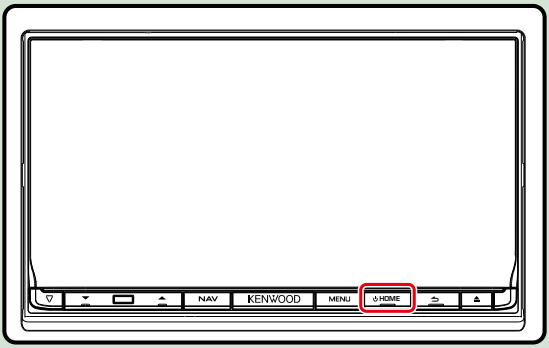
Number	Name	Motion
1	▽ (Reset)	• If the unit or the connected unit fails to operate properly, the unit returns to initial settings when this button is pressed (P.157). • If the SI function is turned on, this indicator flashes when the vehicle ignition is off (P.132).
2	▼, ▲ (Vol)	Adjusts volume.
3	Remote Sensor	Receives the remote control signal.
4	NAV	• Displays the navigation screen. • Pressing for 1 second switches camera view display on/off.*
5	MENU	• Displays the option menu screen. • Pressing for 1 second switches AV out sources.
6	HOME	• Displays the Home screen (P.20). • Pressing for 1 second turns the power off. • When the power off, turns the power on.
7	⮌ (Back)	• Return to the previously viewed screen. • Pressing for 1 second displays the Hands Free screen (P.122).
8	⏏ (Eject)	• Ejects the disc. • When the panel is opened, pressing closes the panel and pressing for 1 second ejects the disc forcibly. • When the panel is closed, pressing for 1 second fully opens the panel to the location of the SD card slot.
9	Disc insert slot	A slot to insert a disc media.
10	SD card slot	• DNN991HD: A slot to insert an SD card. • DNN9710BT: An SD card slot for upgrading the map. For how to upgrade the map, refer to the instruction manual of the navigation system.

*** The function of the [NAV] button can be changed to the display off function. See User interface (P.131).**

Turning on the Unit

The method for turning on the power varies between different models.

1 Press the <HOME> button.



The unit is turned on.

● **To turn off the unit:**

Press the <HOME> button for 1 second.

If it is your first time turning the unit on after installation, it will be necessary to perform *Initial setup (P.14)*.

Login

1 **Select the login user.**

When the owner has not been registered

When the owner has been registered

2 **Enter the password.**

When you selected Administrator or Guest, you do not need to enter a password.

[Auto Login?]: Checking this checkbox allows you to log in to the system automatically from the next time.

3 **Touch [Login].**

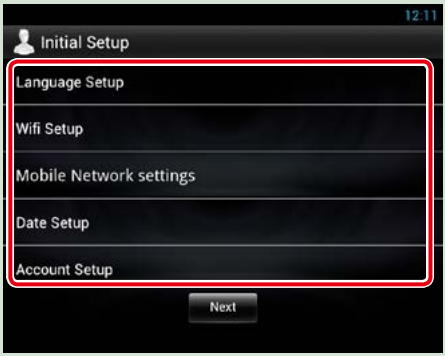
NOTE

- If you forgot your password, create your new password on the Route Collector site.
  http://www.route-collector.com/

Initial setup

Perform this setup when you use this unit for the first time or when you reset the unit. See *Resetting the Unit (P.157)*.

1 Set each item as follows.



Language Setup

Select the language used for the GUI and input methods. Default is "English (United States)".

① Touch [Language Setup].
② Select a language from the list.

WiFi Setup

Configure settings for connection to Wi-Fi.

① Touch [WiFi Setup].
② Slide Wi-Fi to ON.
③ Select the Wi-Fi access point to register from the list.
④ Enter the Password.
⑤ Touch [Connect].
⑥ After setting, press the < ⮌ > button.

For details on operation, see ***Wi-Fi Setup (P.32)***.

Mobile Network settings (DNN991HD)

Set the direct Internet connection with 4G/3G Dongle.

① Touch [Mobile Network settings].
② Touch [Mobile Network configuration].
③ Enter the network information.
④ Touch [Save].
⑤ Touch [Mobile Network].
⑥ After setting, press the < ⮌ > button.

For details on operation, see ***4G/ 3G Dongle Setup (P.35)***.

Date Setup

Set the date and time.

① Touch [Date Setup].

② Touch [Select time zone].

③ Select a time zone.

④ After setting, press the < ⮌ > button.

For details on operation, see *Clock and Date Setup (P.36)*.

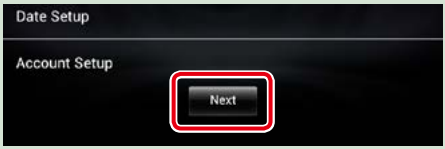
Account Setup

Set the information about the user of this unit.

① Touch [Account Setup].

For details on operation, see *About Account (P.38)*.

2 Touch [Next].



Continued

3 **Set each item as follows.**

Locale

Select the country for the navigation system.
The language, the distance unit, and the gasoline unit are set.

① Touch [SET].
② Select the desired country.
③ Touch [Enter].

Language

Select the language used for the control screen and setting items. Default is "American English (en)".

① Touch [SET].
② Touch [◄] or [►] to select the desired language.
③ Touch [Enter].

For details on operation, see ***Language setup (P.132)***.

Angle

Adjust the position of the monitor. Default is "0".

① Touch [SET].
② Touch desired angle number and [⮌].

For details on operation, see ***Monitor angle control (P.134)***.

Color

Set the screen and button illumination color. You can select whether to allow color scan operation or select a fixed color for operation.

① Touch [SET].
② Touch [ON] or [OFF] of [Panel Color Scan].
③ If you want to change color, touch [SET] of [Panel Color Coordinate].
④ Touch your desired color and [⮌].

For details on operation, see *Panel color coordinate (P.135)*.

EXT SW

Control the external devices.

① Touch [SET].
② Set device name, output pattern, and pulse set for device. Then, touch [⮌].

For details on operation, see *EXT SW setup (P.133)*.

Camera

Set the parameters for the camera.

① Touch [SET].
② Set each item and touch [⮌].

For details on operation, see *Camera Setup (P.137)*.

OEM SETUP (North America Sales area only)

This function requires a commercial adaptor.
Consult your Kenwood dealer for details.

DEMO

Set the demonstration mode. Default is "ON".

① Touch [ON] or [OFF].

4 Touch [Finish].

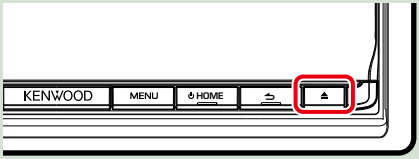
NOTE

• These settings can be set from the SETUP menu. See *Setting Up (P.130)*.

How to Play Media

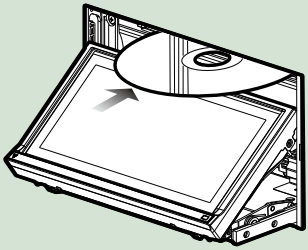
Music CD and disc media

1 Press the <⏏> button.



The panel opens.

2 Insert the disc into the slot.



The panel closes automatically.

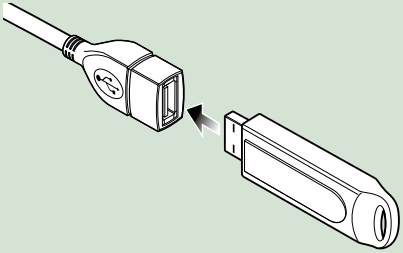
The unit loads the disc and playback starts.

● **To eject the disc:**

Press the <⏏> button.

USB device

1 Connect the USB device with the USB cable.



The unit reads the device and playback starts.

● **To disconnect the device:**

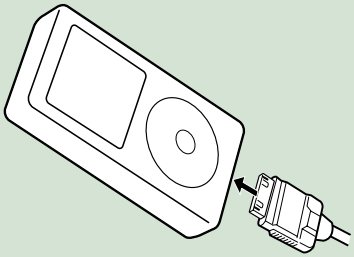
Touch [⏏] on the screen and disconnect the device from the cable.

iPod

1 Connect the iPod.

NOTE

- For the details of the necessary cable and adapter to connect with iPod/iPhone, refer to *Music/ Video Basic Operation (P.68)*.



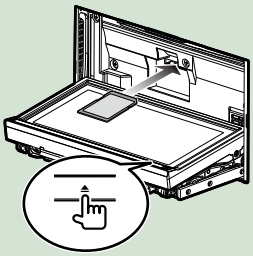
The unit reads the iPod and playback starts.

● **To disconnect the iPod/iPhone connected with the cable:**

Touch [⏏] on the screen and disconnect the device from the cable.

SD card (DNN991HD)

1 Press the <⏏> button for 1 second to open the front panel.



The panel fully opens.

2 Hold the SD card as the diagram below and insert it into the slot until it clicks.

The unit loads the card and playback starts.

● **To remove:**

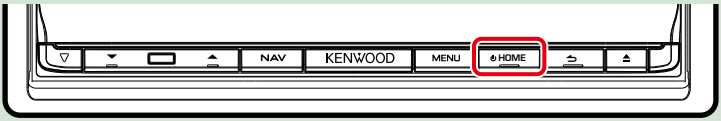
Push the SD card until it clicks and then remove your finger from the card.

The card pops up so that you can pull it out with your fingers.

Operation on the Home Screen

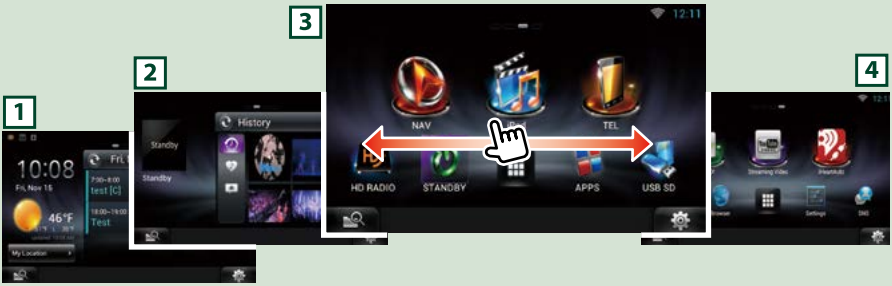
Most functions can be operated on the Home screen.

1 Press the <HOME> button.



Home screen appears.

2 Flick the screen left or right to select the Service panel, Media panel, Source launcher panel, or Network contents panel.



Panel	Description
1 Service panel	Weather widget: Displays the weather forecast for the selected region. Network widget: Displays the schedule, SNS, or RSS.
2 Media panel	Now playing: Displays the title of the song being played or the name of the station you are listening to, and allows you to perform simple operations. Media widget: Displays the Summary board that shows the songs you marked with Like and the playback history, and the Photo frame that shows photos.
3 Source launcher panel	Allows you select a source.
4 Network contents panel	Allows you to select a network-related application.

Source launcher panel and Network contents panel

(Shortcut)
You can register sources and applications you use frequently so that you can start them quickly.

(All source list/ All apps list)
Displays all sources and applications.

All source list/ All apps list

(All source list/ All apps list)
You can scroll the list screen by flicking the screen up/down.

(Home)
Returns to the Source launcher panel or the Network contents panel.

From All source list, you can perform the following functions.

Function	Icon	Operation
Switch the audio source	USB SD, iPod etc.	Touch the icon of the desired source.
Switch the video source	HDMI, VIDEO etc.	Touch the icon of the desired video source.
Display navigation screen	NAV or 6.6 mi Exit 222A: I-435	Touch [NAV] or navigation information.
Turn off all audio function	STANDBY	Touch [STANDBY].
Vehicle information display	OEM	Touch [OEM].

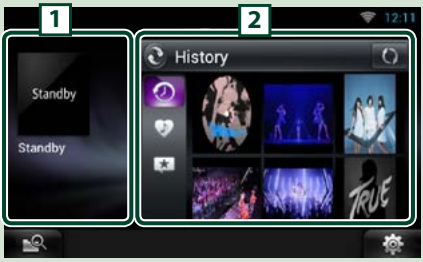
Moving or deleting of an icon on the Source launcher panel and Network contents panel

1. **Touch and hold the icon.**
2. **Drag the icon to the desired position or Recycle Bin.**

Adding of a shortcut icon to Source launcher panel or Network contents panel

1. **Touch [ ] in Source launcher panel or Network contents panel.**
2. **Touching the icon continuously to display the Source launcher panel or Network contents panel screen.**
3. **Drag the icon to an empty space.**

Media panel



1 Now playing widget

Displays the title of the song being played or the name of the station you are listening to, and allows you to perform simple operations. See *Now playing Widget (P.56)*.

2 Media widget

Touching [ ] allows you to switch among Summary Board, and photo frame.

See *Summary Board Widget (P.58)*, *Photo Frame Widget (P.58)*.

Service panel

1 Weather widget

DNN991HD: Displays the today's weather forecast. See *Weather Widget (P.42)*.

DNN9710BT: Displays the clock and date.

2 Network widget

Touching [ ] allows you to switch between Schedule, RSS, and SNS.

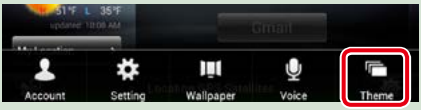
See *Today Widget (P.45)*, *SNS Widget (P.45)*, *RSS Widget (P.46)*.

Change the skin for home screen

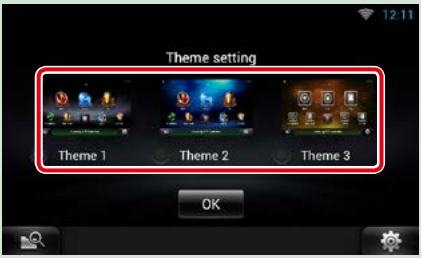
You can select a home screen skin from 3 types.

1 **Press the <MENU> button.**

2 **Touch [Theme].**



3 **Select a skin.**



4 **Touch [OK].**

Common Operation

Introduces the common operation.

General

There are some functions which can be operated from most screens.

(Mixed Media Search)

Touch to display the Mixed Media Search screen. *(P.59)*

(Quick menu)

Touch to display the quick menu. The content of the menu are as follows.

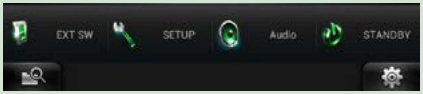
: Touch to turn on or off the external device power supply.

: Displays the SETUP Menu screen.

: Displays the Audio Control Menu screen.

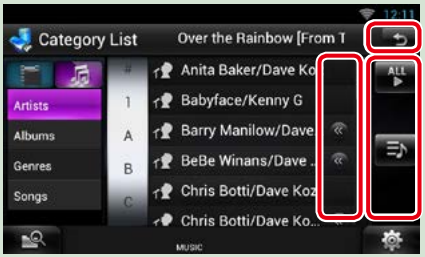
: Displays the control screen of current source. Icon feature differs depending on the source.

Quick menu screen



List screen

There are some common function keys in the list screens of most sources.



(Scroll)

Touch to scroll through texts on the display.

etc.

Touch keys with various functions are displayed here.

Displayed keys differ depending on the current audio source, status, etc.

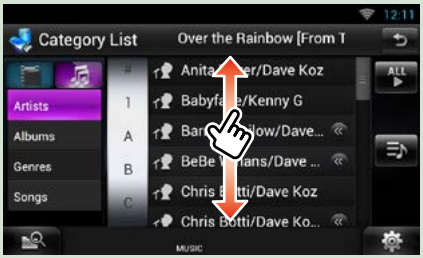
For examples of functions of each key, refer to the table below.

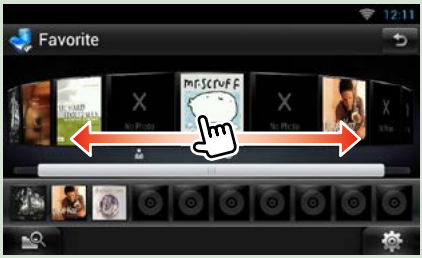
Returns to previous screen.

Key	Function
ALL	Lists all the music in the lower hierarchy.
	Moves to the upper hierarchy.
	Displays current category folder.
	Displays music/movie file list.

Flick scrolling

You can scroll the list screen by flicking the screen up/down or right/left.



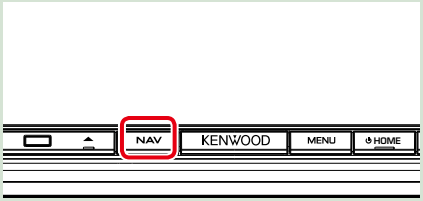


Navigation Operation

For details on the navigation function, please refer to the Navigation Instruction Manual.

Display the navigation screen

1 Press the <NAV> button.



The navigation screen appears.

Control audio from the navigation screen

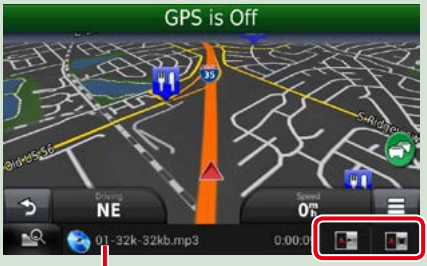
You can control audio sources while the navigation screen is displayed.

Also, you can view the navigation information while the source control screen is displayed.

1 Touch the information bar.

The navigation screen with audio information appears.

2 Touch [ ] or [ ] in the navigation screen.



Touching this area displays the audio screen.

: Displays the navigation and control keys of the current source.

: Displays the navigation and current video playback display.

NOTE

- The screen switches between playback screen and camera view each time the viewing area is touched.
- Touching the source icon in the bottom of the screen displays the full audio screen.
- Streaming Video and AUPEO! just plays music. You cannot control it and watch video.

● **To return to the full navigation screen:**
Touch [ ].

NOTE
- For details on control keys, refer to the instructions in each section.

Trip log function

You can upload the routes you traveled and the songs you listened to the Route Collector site so that you can confirm them later.

Precaution
- Trip log function can be used to log information such as routes you have traveled and songs you have listened to. Such information is uploaded to our Route Collector site, for later access by you through your computer. Non-personal data from this log is also kept and used by us for statistical purposes to improve the quality of our products. By selecting to use this function, you are accepting use of the data for such statistical purposes.
  This is an optional function that can be activated at your sole option and responsibility the procedures set forth in the left column.

1 Press the <MENU> button in the navigation screen or source control screen.

2 Touch [Triplog On].

3 Touch [Yes].

When the Trip log is active, " " appears in the status bar.

NOTE
- You must have a connection with the internet.
- You can use the Trip log function when you have logged in the system as Owner or User.

Where To function

You can set the destination of the navigation easily by setting the destination of the Route Collector site from your PC or your smartphone.

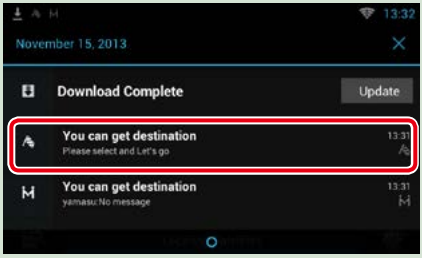
1 Log in to Route Collector site by the owner account.

http://www.route-collector.com/

2 Set the destination in the Route Collector site.

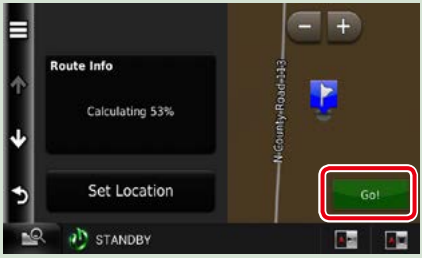
3 You will be notified by " " icon on the status bar.

4 Drag the status bar downward. Touch [ ].



It will be set as the destination of the navigation.

5 Touch [GO] to start the route guide.

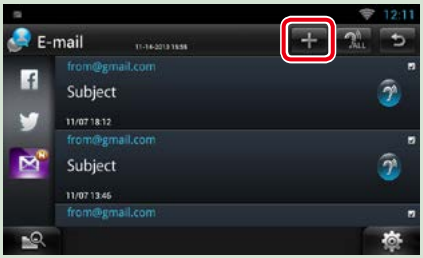


NOTE
- You can set a user account when you have logged in the Owner.
- You must have a connection with the internet.
- For the operation of the Route Collector site refer to the instruction in its website.

Come Here function

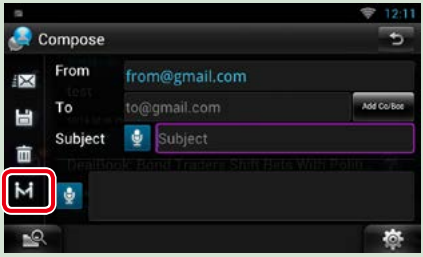
When you go to pick up your family or friends, send them the mail to decide the meeting point. After they enter the meeting point you can easily set it as the destination of your navigation.

1. **Press the <HOME> button.**
2. **Flick the screen left or right to select the Network contents panel.**
3. **Touch [ ].**
4. **Touch [SNS].**
5. **Touch [(mail)].**
6. **Touch [ ].**



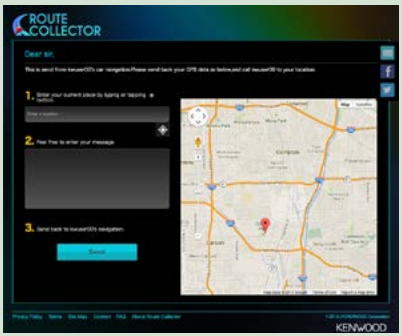
7. **Touch [ ].**

   The address for setting the meeting point is added in the text part.

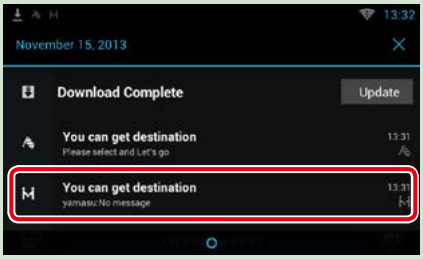


8. **Enter the address, subject, etc. to complete the mail and send it.**
9. **Your family or friend will enter the meeting point.**

   Check the address in the mail, register as the meeting point and press Send.

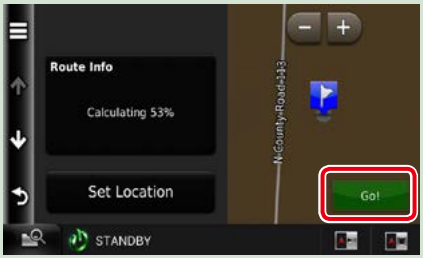


10. **You will be notified by the " " icon on the status bar when they enter the meeting point.**
11. **Drag the status bar downward. Touch [ ].**



It will be set as the destination of the navigation.

12. **Touch [GO] to start the route guide.**



NOTE

- You must have a connection with the internet.
- The address of the meeting point is effective only 2 hours after adding the address. After that you can not enter it.
- Come Here function can be used for one person (one meeting point) at a time.

Tracking function

When you upload the location of you car to the Route Collector site, you can check it in case your car is stolen.

Precaution

- Tracking function is a handy function to be used for the primary purpose of tracking the location of your vehicle. This function can also be used for secondary purposes, at your sole option and responsibility. In any event, we cannot accept any responsibility for any results of your use of the function, for whatever purpose.
  Should you select to use this option, please activate the function through the procedures set forth in the left column.

1 Log in to Route Collector site by the owner account.

http://www.route-collector.com/

2 Set to ON the Tracking function in the Route Collector site.

You can check the location of your car in the Route Collector site.

NOTE

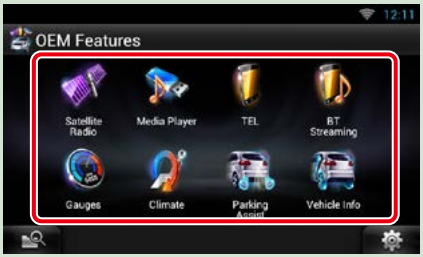
- You must have a connection with the internet.
- You can set this function and check the location of you car only when you log in by the owner account.
- To get the correct information we recommend using 4G/3G Dongle. (DNN991HD only)
- For the operation of the Route Collector site refer to the instruction in its website.

OEM Feature Operation

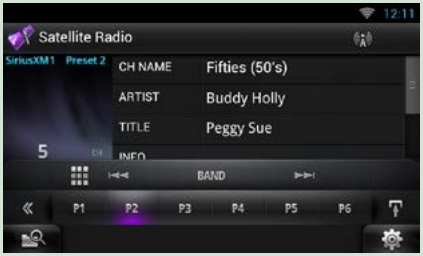
By connecting this unit to the bus system of the vehicle using an iDataLink (commercially available), this unit can access the satellite radio source provided for the vehicle and vehicle information can be displayed on this unit.

1. **Press the <HOME> button.**
2. **Flick the screen left or right to select the Source launcher panel.**
3. **Touch [ ].**
4. **Touch [OEM Features].**

   OEM Features screen appears.



: Displays the control screen of the satellite radio source provided for the vehicle.



: Displays the control screen of the media player source provided for the vehicle.

: Displays the control screen of the Bluetooth Hands Free function provided for the vehicle.

: Displays the control screen of the Bluetooth streaming source provided for the vehicle.

: Displays information about the instruments such as a speedometer.

: Displays information about the air conditioner of the vehicle.

: Displays information about the Parking Distance Sensor of the vehicle.

: Displays information about the tire pressures of the vehicle.

NOTE

- Displayable screens, button names, and screen names vary depending on the type of the connected iDataLink and the model of the vehicle. For more details, access the following URL:
  www.idatalink.com/

Network Setup

You can not use Hi-Fi setup and Wi-Fi Hotspot, 4G/3G Dongle setup at the same time. You can make it effective either Wi-Fi or Wi-Fi Hotspot, 4G/3G Dongle.

- *Wi-Fi Setup (P.32)*

- *Wi-Fi Hotspot Setup (P.34)*
- *4G/ 3G Dongle Setup (P.35)* (DNN991HD)

Wi-Fi Setup

You can connect to a Wi-Fi access point to connect to Internet.

Preparation

- Make preparations for using the Wi-Fi access point for Internet connection through use of the tethering function of the smartphone.
- Set to OFF the Wi-Fi Hotspot in *Wi-Fi Hotspot Setup (P.34)* and 4G/3G Dongle in *4G/ 3G Dongle Setup (P.35)*.

1 Press the <HOME> button to display the Home screen.

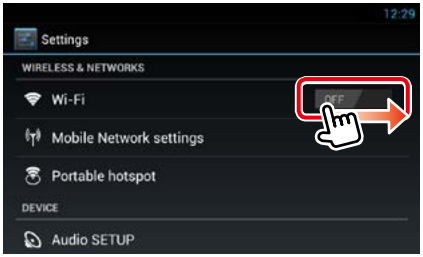
Note

- To display the Network contents panel, Press the <HOME> button again.

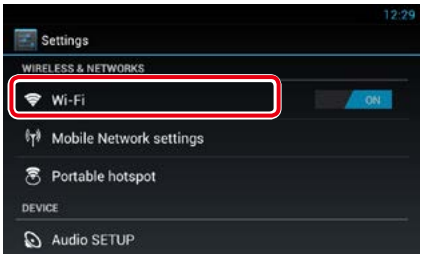
2 Press the <MENU> button.

3 Touch [Setting].

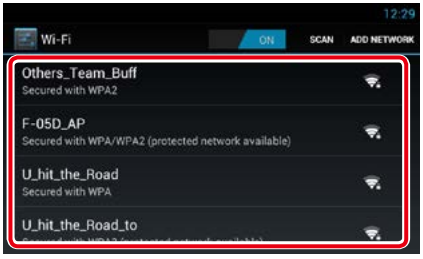
4 Slide Wi-Fi to ON.



5 Touch [Wi-Fi].



6 Select the Wi-Fi access point to register from the list.



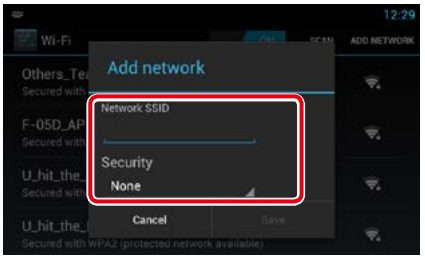
7 Enter the Password.

8 Touch [Connect].

Register the Wi-Fi access point manually

1 **Touch [ADD NETWORK].**

2 **Enter the SSID code.**



3 **Select the security.**

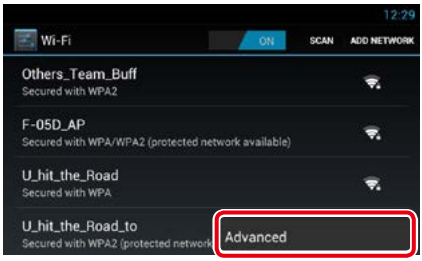
4 **Enter the security code.**

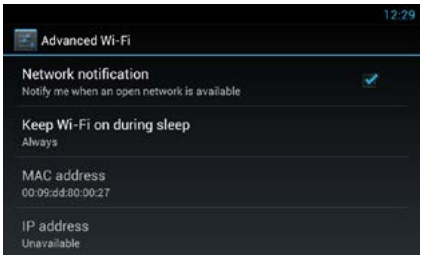
5 **Touch [SAVE].**

Confirm the MAC address

1 **Press the <MENU> button.**

2 **Touch [Advanced].**





3 **Press the < ⮌ > button.**

Wi-Fi Hotspot Setup

If there is no Wi-Fi access point, this unit becomes a Wi-Fi access point. You can connect your smartphone and your tablet PC, and enjoy Kenwood Wireless Link function. *(P.90)*

Preparation

- When Wi-Fi Hotspot is in use you can not connect to the Internet via Wi-Fi. To connect to the Internet, 4G/3G Dongle (sold separately) is necessary. *(P.35)*
- Set to OFF the Wi-Fi in *Wi-Fi Setup (P.32)*.

1 Press the <HOME> button to display the Home screen.

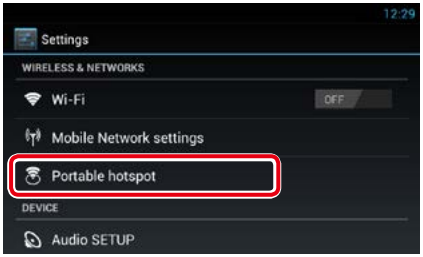
Note

- To display the Network contents panel, Press the <HOME> button again.

2 Press the <MENU> button.

3 Touch [Setting].

4 Touch [Portable hotspot].



5 Touch [Configure Wi-Fi hotspot].

6 Enter the SSID code. Select the security. Enter the password.

When you check Show password, the password that you set is displayed.

7 Touch [Save].

8 Touch [Portable Wi-Fi hotspot].

This unit works as the Wi-Fi access point.

4G/ 3G Dongle Setup (DNN991HD)

This unit is designed to work with 4G/3G Dongle by Verizon (sold separately). You can connect to the Internet without a smartphone. With 4G/3G Dongle you can use the following functions.

- Internet connection while using Wi-Fi Hotspot.
- Certain update of the information of your car location in the Tracking function.

Preparation

- Set to OFF the Wi-Fi in *Wi-Fi Setup (P.32)*.

1 Press the <HOME> button to display the Home screen.

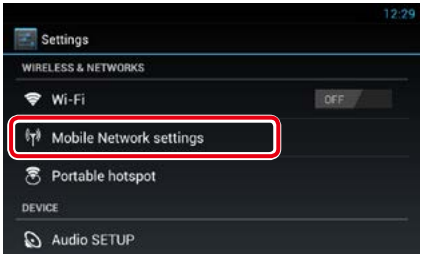
Note

- To display the Network contents panel, Press the <HOME> button again.

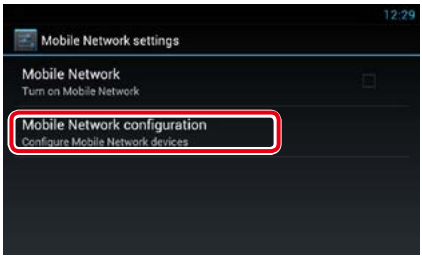
2 Press the <MENU> button.

3 Touch [Setting].

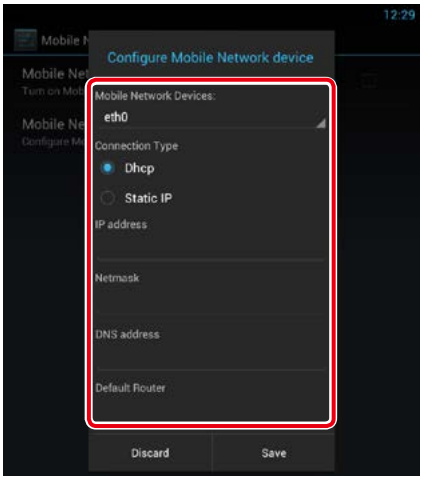
4 Touch [Mobile Network setting].



5 Touch [Mobile Network configuration].

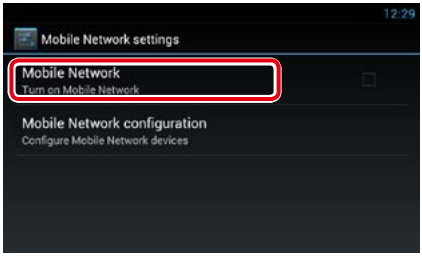


6 Enter the network information.



7 Touch [Save].

8 Touch [Mobile Network].



Connect to the Internet.

Clock and Date Setup

Clock and Date Setup

1 Press the <HOME> button to display the Home screen.

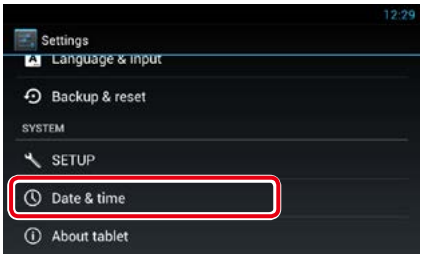
Note

- To display the Network contents panel, Press the <HOME> button again.

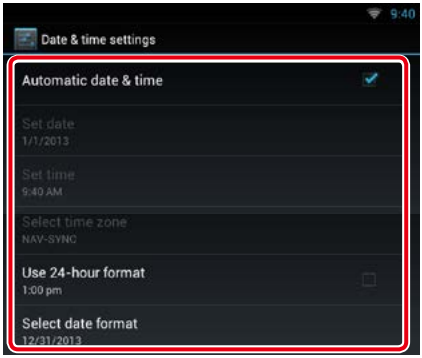
2 Press the <MENU> button.

3 Touch [Setting].

4 Touch [Date & time].



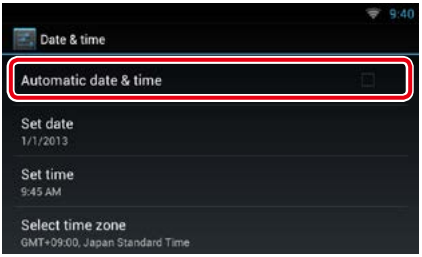
5 Set each item as follows.



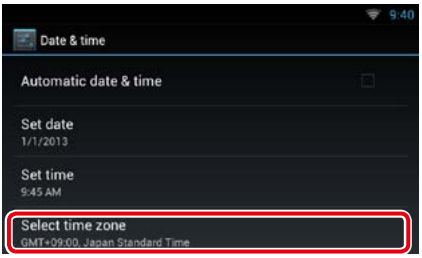
6 Press the < ⮌ > button.

Adjust the date and time manually.

1 Touch [Automatic date & time] to remove the check.

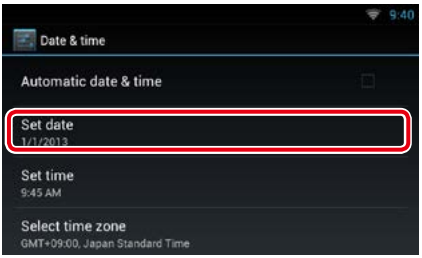


2 Touch [Select time zone].

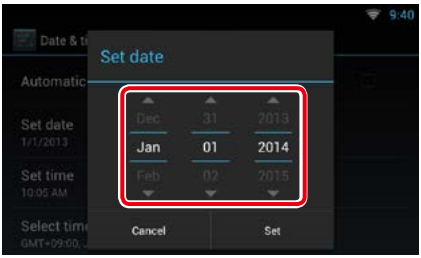


3 Select a time zone.

4 Touch [Set date].



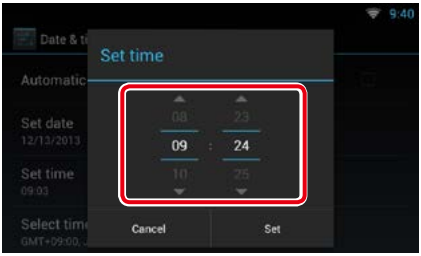
5 Adjust the date.



6 Touch [Set].

7 Touch [Set time].

8 Adjust the time.



9 Touch [Set].

10 Press the < ⮌ > button.

Account Setup

About Account

To use this unit, you must register an account.

Types of accounts

You can create accounts to maintain privacy when using the mail feature or social media.

Administrator

As Administrator, you can create an owner account and perform initial setup.

You can log in to the system if you have not created an owner account.

Guest

An account for guests such as your friends.

The guest can operate this unit, but cannot use the functions related to mail, social media, and Route Collector site.

Owner

The account for the person who manages this unit.

The owner can use the functions related to mail, social media, and Route Collector site.

You can register users such as your family.

User

The account for the user of this unit.

The user can use the functions related to mail, social media, and Route Collector site.

You can register up to 4 user accounts.

Account registration procedure

1 Create an account in the Route Collector site.

Create an account refering to *Create User Account (P.38)* or the Route Collector site.

http://www.route-collector.com/

2 Register the account in this unit.

To register an Owner account, refer to *Set Owner Account (P.39)*.

To register an User account, refer to *Set User Account (P.40)*.

3 Switch between login accounts.

See *Switch the User Login (P.40)*.

Create User Account

To use this unit, you need to create an account in the Route Collector site.

Preparation

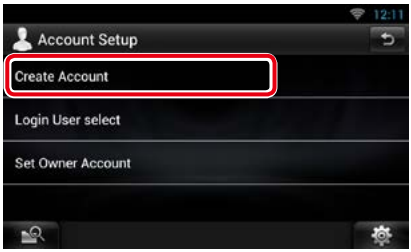
- To register yourself in the Route Collector site as a user, you need a mail address.
- You can register yourself via the Web. *http://www.route-collector.com/*
- This step may be skipped if you have already registered yourself in the Route Collector site.

1 Press the <HOME> button to display the Home screen.

2 Press the <MENU> button.

3 Touch [Account].

4 Touch [Create Account].



5 Enter account information.

You cannot register an account which has already been used. Register another account name.

6 Touch [OK].

The account is temporarily registered in the Route Collector site.

7 Activate the account.

A confirmation mail is sent to the registered mail address. Open the indicated URL to complete account registration.

Set Owner Account

You can register an owner account for the person who manages this system.

Preparation

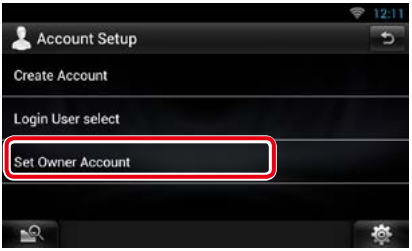
- You must have a connection with the internet. See *Network Setup (P.32)*.
- First create an account in the Route Collector site. See *Create User Account (P.38)*.
- If you have not created an owner account, log in to the system as Administrator.
- If you have created an owner account, log in to the system after account resetting.

1 Press the <HOME> button to display the Home screen.

2 Press the <MENU> button.

3 Touch [Account].

4 Touch [Set Owner Account].



5 Enter account information.

Enter the information registered in the Route Collector site.

6 Touch [OK].

Set User Account

You can register a user account for the user of this unit.

Preparation

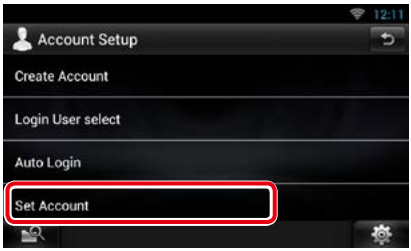
- You must have a connection with the internet. See *Network Setup (P.32)*.
- First create an account in the Route Collector site. See *Create User Account (P.38)*.
- You can set a user account when you have logged in the Owner.

1 Press the <HOME> button to display the Home screen.

2 Press the <MENU> button.

3 Touch [Account].

4 Touch [Set Account].



5 Enter account information.

Enter the information registered in the Route Collector site.

6 Touch [OK].

Switch the User Login

You can switch to a different account from the one currently logged in.

1 Press the <HOME> button to display the Home screen.

2 Press the <MENU> button.

3 Touch [Account].

4 Touch [Login User select].

5 Select an account.

6 Enter the password.

Delete User Account

You can delete a previously registered user account.

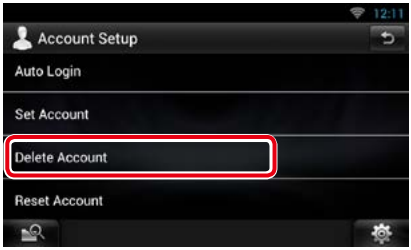
Preparation
- You can set a user account when you have logged in the Owner.

1 Press the <HOME> button to display the Home screen.

2 Press the <MENU> button.

3 Touch [Account].

4 Touch [Delete Account].



5 Select an account.

6 Touch [OK].
Confirmation screen appears.

7 Touch [Yes].

Reset Owner Account

You can delete previously registered owner and user accounts.

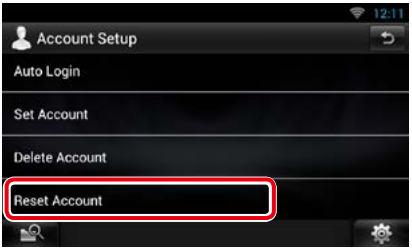
Preparation
- You can set a user account when you have logged in the Owner.

1 Press the <HOME> button to display the Home screen.

2 Press the <MENU> button.

3 Touch [Account].

4 Touch [Reset Account].



5 Enter the owner account's password.

6 Touch [OK].
Confirmation screen appears.

7 Touch [Yes].

Note
- The data, log, and settings used in the account are deleted.

Widget and Application Operation

Weather Widget (DNN991HD)

Displays the weather forecast for the selected region.

Preparation

- You must have a connection with the internet. See *Network Setup (P.32)*.
- You can use this feature for 2 years after registration of the owner account. To use it continuously, a usage fee is required. For details, see web site of Route Collector. *http://www.route-collector.com/*

1 Press the <HOME> button.

2 Flick the screen left or right to select the Service panel.

1 Time & Date

Displays the current time and date.

2 Weather information

Displays the weather forecast for the selected region.

Touching this starts the weather application.

3 City information

Displays the selected region.

Touching this displays a region selection screen. See *City select (P.42)*.

City select

1 Touch [(City name)] in the Weather Widget.

1 City list

Displays a region list.

Touching this displays the selected region.

2 [Add City]

Starts the weather application to add the region. See *Add a City (P.43)*.

Weather Application (DNN991HD)

Displays the weather forecast for the selected region.

Preparation

- You must have a connection with the internet. See ***Network Setup (P.32)***.
- You can use this feature for 2 years after registration of the owner account. To use it continuously, a usage fee is required. For details, see web site of Route Collector. ***http://www.route-collector.com/***

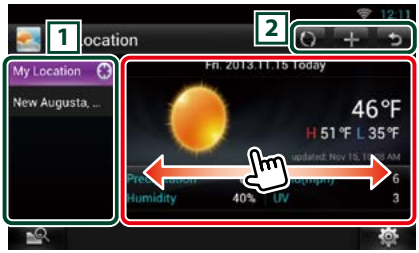
1 Press the <HOME> button.

2 Flick the screen left or right to select the Network contents panel.

3 Touch [ ].

4 Touch [Weather].

5 Perform desired operation as follows.



1 City list

Displays a region list.

Touching this displays the selected region.

2

: Reads information again.

: Adds a region.

: Terminates the application.

(Weather information)

Displays the today's weather forecast and the weather forecast for the next 6 days.

Menu

1 Press the <MENU> button.

Delete

Deletes a region from the City list. See ***Delete City (P.44)***.

Setting

Allows you to set the information update interval, etc. See ***Weather setup (P.44)***.

Add a City

Adds a region to the City list.

1 Touch [ ].

2 Search for a region.

(Voice recognition)

You can enter a region using the voice recognition function. When "Speak now" is displayed, pronounce the region name.

[Search]

Search starts.

3 Select a region.

Touching the region adds it to the list, and displays the weather forecast.

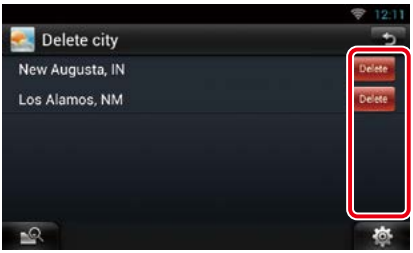
Delete City

You can delete a region from the City list.

1 **Press the <MENU> button.**

2 **Touch [Delete] in the Menu.**

3 **Delete the region.**



4 **Touch [Yes].**

5 **Touch [⮌].**

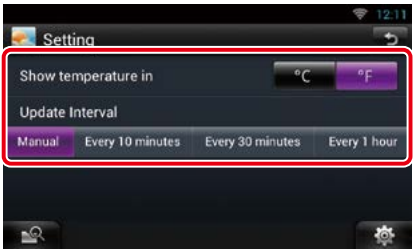
Weather setup

Performs setup when using Weather Application.

1 **Press the <MENU> button.**

2 **Touch [Setting] in the Menu.**

3 **Select an option as follows.**



Show temperature

Select a temperature scale.

Update interval

Set an information update interval.

4 **Touch [⮌].**

Today Widget

You can display the today's schedule registered in Google Calendar.

Preparation

- To use this service, a Google account is required.
- You can use a user account when you have logged in the Owner or User.

1 Press the <HOME> button.

2 Flick the screen left or right to select the Service panel.

3 Touch [ ].

4 Select the Today Widget.

1

: Starts the schedule application.
: Reads out all schedules in an auditory fashion.
: Switches to RSS or SNS.

2 Schedule list

Displays the today's schedule registered in Google Calendar.

Touching it displays the event view.

: Reads out the schedule in an auditory fashion.

SNS Widget

You can use Facebook, Twitter, Gmail, and email (IMAP).

Preparation

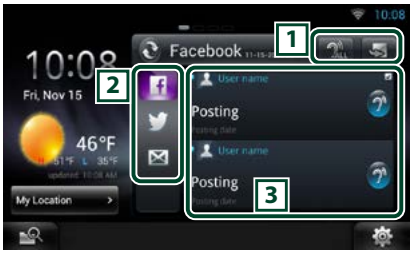
- To use each service, the email, Google, Facebook, Twitter or email account is required.
- You can use a user account when you have logged in the Owner or User.

1 Press the <HOME> button.

2 Flick the screen left or right to select the Service panel.

3 Touch [ ].

4 Select the SNS Widget.



1

: Starts the SNS application.
: Reads out all contents in an auditory fashion.
: Switches to the schedule or RSS.

2 Category

Select a service category.

3 SNS article list

Displays the contents selected in Category in a new order.

Touching this starts the SNS application and displays its contents.

When the latest information is displayed at the top, sliding the list allows you to update the information.

: Reads out the SNS contents in an auditory fashion.

RSS Widget

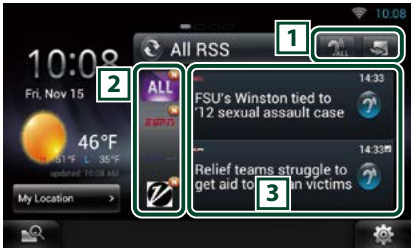
Displays the RSS news.

1 Press the <HOME> button.

2 Flick the screen left or right to select the Service panel.

3 Touch [ ].

4 Select the RSS Widget.



1

: Starts the RSS application.

: Reads out all the contents in an auditory fashion.

: Switches to the schedule or SNS.

2 Category

Select a service category.

3 RSS article list

Displays the contents selected in Category in a new order.

Touching this starts the RSS application and displays its contents.

When the latest information is displayed at the top, sliding the list allows you to update the information.

: Reads out the RSS contents in an auditory fashion.

Schedule Application

You can edit schedules on the internet. In addition, you can also synchronize the schedule with Google Calendar.

Preparation

- You must have a connection with the internet. See *Network Setup (P.32)*.
- To use Google Calendar, a Google account is required.
- You can use a user account when you have logged in the Owner or User.

Register an account

Register account information for synchronization with the Google account.

1 Press the <HOME> button.

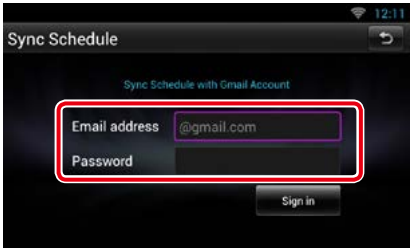
2 Flick the screen left or right to select the Network contents panel.

3 Touch [ ].

4 Touch [Schedule].

5 Touch [Gmail].

6 Enter the Email address and Password.



7 Touch [Sign in].

Schedule Operation

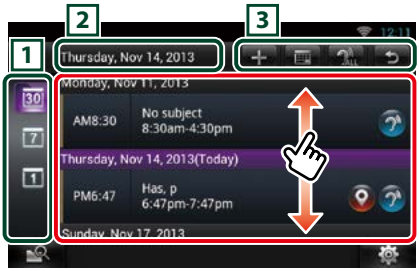
1 Press the <HOME> button.

2 Flick the screen left or right to select the Network contents panel.

3 Touch [ ].

4 Touch [Schedule].

5 Perform desired operation as follows.



1 View category

: Displays agendas.
: Displays the weekly schedule.
: Displays the daily schedule.

2 Date information

Displays the date of the displayed schedule.
Touching this displays the date of the schedule to be displayed.

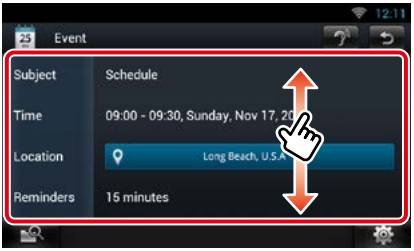
3

: Add a schedule.
: Displays the today's schedule.
: Reads out all schedules by voice.
: Terminates the application.

(Schedule list)

Displays a schedule.
Touching this displays details of the schedule.
: Reads out the content of the schedule in an auditory fashion.

6 Detailed schedule view.



(Text-to-speech)

Reads out the content of the schedule by voice.

Menu

1 Press the <MENU> button.

Agenda view/ Week view/ Day view

Sign out

Logs out from the current account.

Event view

Edit event

Edit schedule.

Delete event

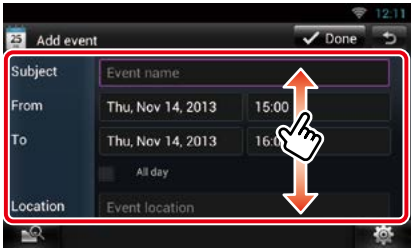
Deletes schedule.
When a confirmation screen appears, touch "Yes".

Add event

Adds an event to the schedule.

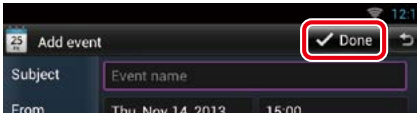
1 Touch [ ] in the Schedule application.

2 Enter your schedule.



Enter an event name, date and time, description, etc.

3 Add an event.

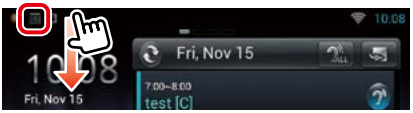


Synchronizes the schedule with Google Calendar if used.

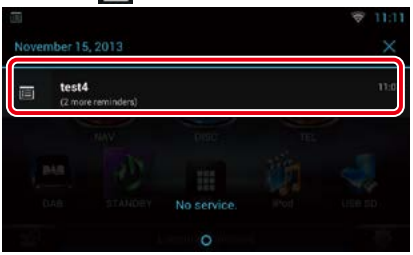
Notification

Displays a notification icon in the status bar when the set time is reached.

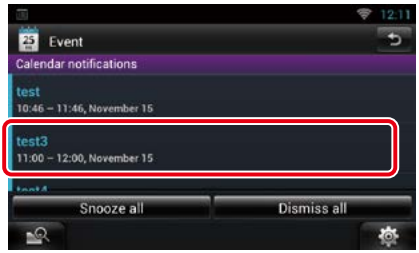
1 Drag the status bar downward.



2 Touch [ ].



3 Touch the subject to display details.



The Schedule application starts to display details.

Facebook (SNS Application)

Displays the screen for using Facebook.

Preparation

- You must have a connection with the internet. See *Network Setup (P.32)*.
- To use a Facebook service, the corresponding account is required.
- You can use a user account when you have logged in the Owner or User.

Register an account

1 Press the <HOME> button.

2 Flick the screen left or right to select the Network contents panel.

3 Touch [ ].

4 Touch [SNS].

5 Touch [(Facebook)].

6 Touch [Sign in].

7 Enter the Email address/Phone and Password.

8 Touch [Log in].

Operation

1 Press the <HOME> button.

2 Flick the screen left or right to select the Network contents panel.

3 Touch [ ].

4 Touch [SNS].

5 Touch [(Facebook)].

6 Perform desired operation as follows.

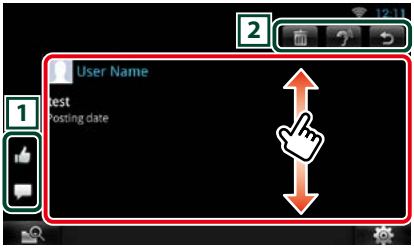
1

: Create a new article.
: Posting the current place.
: Reads out all articles by voice.
: Terminates the application.

2 **Article list**

Displays an article or message.
Touching this displays details.
While the latest information is displayed at the top, sliding the list down updates the information.
: Reads out the article by voice.

7 Detailed article or message view.



1

: Votes as "Like".
: Posts a comment.

2

: Deletes an article. When the confirmation screen appears, touch "Ok".
: Reads the content of the comment by voice.
: Returns to previous screen.

Menu

1 Press the <MENU> button.

Article list view

Setting

Set an update interval.

Sign out

Logs out from the current account.

Add to post

Create an article to be posted to the SNS service of the selected category.

1 Touch [ ] in the SNS application.

2 Create an article to post.

1

Enter an article to post.

: Enter a comment using the voice recognition function. When "Speak now" appears, speak the comment.

[Post] : Posts the article.

2

: Post photo.

: Returns to previous screen.

3

Select a fixed phrase.

Twitter (SNS Application)

Displays the screen for using Twitter.

Preparation

- You must have a connection with the internet. See *Network Setup (P.32)*.
- To use a Twitter service, the corresponding account is required.
- You can use a user account when you have logged in the Owner or User.

Register an account

1 Press the <HOME> button.

2 Flick the screen left or right to select the Network contents panel.

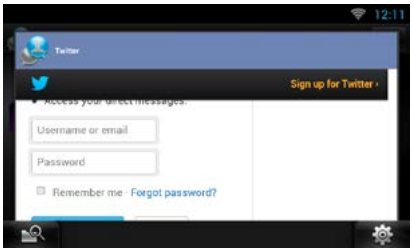
3 Touch [ ].

4 Touch [SNS].

5 Touch [(Twitter)].

6 Touch [Sign in].

7 Enter the Username/email and Password.



8 Touch [Authorize app].

Operation

1 Press the <HOME> button.

2 Flick the screen left or right to select the Network contents panel.

3 Touch [ ].

4 Touch [SNS].

5 Touch [(Twitter)].

6 Perform desired operation as follows.

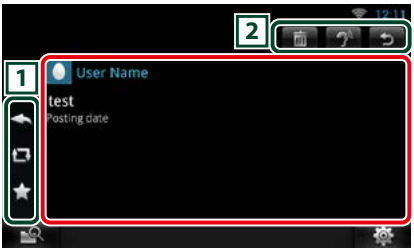
1

: Create a new article.
: Posting the current place.
: Reads out all articles by voice.
: Terminates the application.

2 **Article list**

Displays an article or message.
Touching this displays details.
While the latest information is displayed at the top, sliding the list down updates the information.
: Reads out the article by voice.

7 Detailed article or message view.



1

: Create a reply.
: Create a ReTweet.
: Adds to Favorites.

2

: Delete the Tweet.
: Reads the content of the comment by voice.
: Returns to previous screen.

Menu

1 Press the <MENU> button.

Article list view

Setting

Set an update interval.

Sign out

Logs out from the current account.

Add to post

Create an article to be posted to the SNS service of the selected category.

1 Touch [ ] in the SNS application.

2 Create an article to post.

1

Enter an article to post.
: Enter a comment using the voice recognition function. When "Speak now" appears, speak the comment.
[Post] : Posts the article.

2

: Post current location.
: Returns to previous screen.

3

Select a fixed phrase.

E-mail (SNS Application)

Displays the screen for using E-mail.

Preparation

- You must have a connection with the internet. See Network Setup (P.32).
- To use a Google or email service, the corresponding account is required.
- You can use a user account when you have logged in the Owner or User.

Register an account

1. **Press the <HOME> button.**
2. **Flick the screen left or right to select the Network contents panel.**
3. **Touch [ ].**
4. **Touch [SNS].**
5. **Touch [(mail)].**
6. **Touch [Sign in].**
7. **Touch [Gmail].**
8. **Enter the Email and Password.**

9. **Touch [Next].**

NOTE

- You can register Email (IMAP). Select [Other] in step 7, and enter necessary data according to the displayed messages.

Operation

1. **Press the <HOME> button.**
2. **Flick the screen left or right to select the Network contents panel.**
3. **Touch [ ].**
4. **Touch [SNS].**
5. **Touch [(mail)].**
6. **Perform desired operation as follows.**

1

: Create a new article.
: Reads out all articles by voice.
: Terminates the application.

2 **Inbox list**

Displays an article or message.
Touching this displays details.
While the latest information is displayed at the top, sliding the list down updates the information.
: Reads out the article by voice.

7 Detailed article or message view.

1

: Creates a reply mail.
: Creates a reply mail for all.
: Creates a forwarded mail.

2

: Deletes an article. When the confirmation screen appears, touch "Ok".
: Reads the content of the comment by voice.
: Returns to previous screen.

Menu

1 Press the <MENU> button.

Inbox list view

Setting

Set an update interval.

Account

Select the account and label to be displayed.

① Select an account.
② Select a label.

Add account

Register a new account.

Delete account

Delete a registered account.

Select the account to delete by putting a checkmark, and then touch [OK].

Add to post

Create an article to be posted to the SNS service of the selected category.

1 Touch [ ] in the SNS application.

2 Create an article to post.

1

: Sends the mail.
: Stores the mail temporarily.
: Deletes the mail.
: Enters the address of the meeting point for Come Here function. See *Come Here function (P.28)*.

2

: Returns to previous screen.

3

Create a mail message to send.

: Enter a comment using the voice recognition function. When "Speak now" appears, speak the comment.

[Add Cc/Bcc] : Displays cc and Bcc.

RSS Application

Displays an RSS feed.

Preparation

- You must have a connection with the internet. See *Network Setup (P.32)*.
- You can use a user account when you have logged in the Owner or User.

1 Press the <HOME> button.

2 Flick the screen left or right to select the Network contents panel.

3 Touch [ ].

4 Touch [(RSS)].

5 Perform desired operation as follows.

1

: Adds an RSS feed. See *Add RSS feed (P.55)*

: Reads out all articles by voice.

: Terminates the application.

2 Category

Select the RSS feed to be displayed.

3 Article list

Display the article.

Touching this displays details.

While the latest information is displayed at the top, sliding the list down updates the information.

: Reads out the article by voice.

6 Detailed article view.

1

: Registers the RSS feed in the bookmark of the Route Collector site. You can read it later in the Route Collector site.

: Reads the content by voice.

: Returns to previous screen.

2

Moves to the previous or next article.

Menu

1 Press the <MENU> button.

Article list view

Delete

Delete an RSS feed. See *Delete RSS feed (P.55)*

Setting

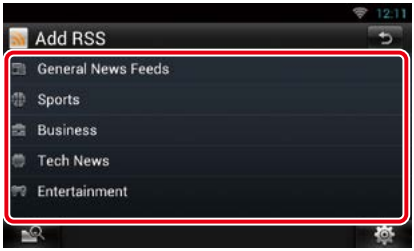
Set the update interval. See *RSS setup (P.55)*

Add RSS feed

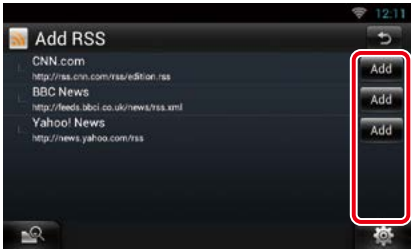
Add an RSS feed.

1 Touch [ ] in the RSS application.

2 Select a category.



3 Touch [Add].



Note

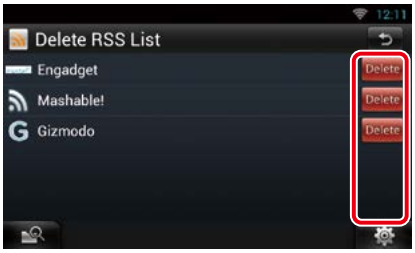
- In order to add an selectable RSS feed, you need to edit it in the Route Collector site.
  See *www.route-collector.com/*

Delete RSS feed

Delete an RSS feed.

1 Press the <MENU> button.

2 Touch [Delete].



3 Touch [Yes] to confirm.

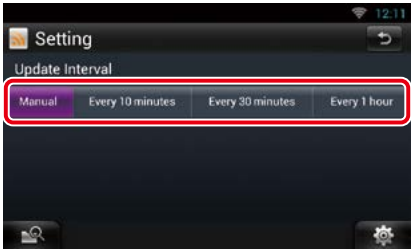
RSS setup

Performs setup when using RSS Application.

1 Press the <MENU> button.

2 Touch [Setting] in the Menu.

3 Select an option as follows.



Update interval

Set the information update interval.

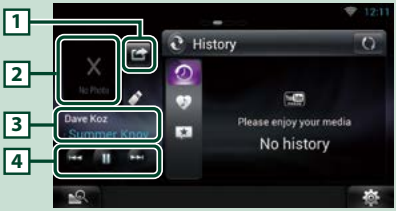
Now playing Widget

Displays the information about the song or station you are listening to, and allows you to perform simple operations.

1 Press the <HOME> button.

2 Flick the screen left or right to select the Media panel.

Media source such as CD or USB



1 (I'm listening)

You can post the information about the song you are listening to, on twitter, Fecebook. See *Posting the information about the song you are listening to (P.57)*.

2 Album art

Touching Album art displays the Source control screen.

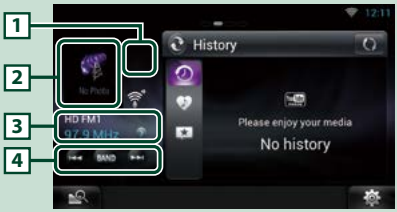
3 Information display

Displays the information (title, etc.) about the song being played.

4

Allow you to stop playback temporarily and select songs.

Radio source such as Radio, HD Radio Technology or SiriusXM



1 (I'm listening)

You can post the information about the song you are listening to, on twitter, Fecebook. See *Posting the information about the song you are listening to (P.57)*.

2 Artwork

Touching artwork displays the Source control screen.

3 Information display

Displays the band, frequency, etc.

Touching this displays the Preset list screen. See *Preset select (P.57)*.

4

Allows you to select a band and a station.

Posting the information about the song you are listening to

You can post the information about the song you are listening to, on Twitter, Facebook, or Route Collector site.

1 Touch [ ].

2 Create the information you want to post.

1

Enter the information you want to post.

: Enter a comment using the voice recognition function. When "Speak now" is displayed, pronounce the comment.

[Post] : Posts the information.

2 **Fixed phrase**

Select the information about the song you are listening to and a fixed phrase.

3

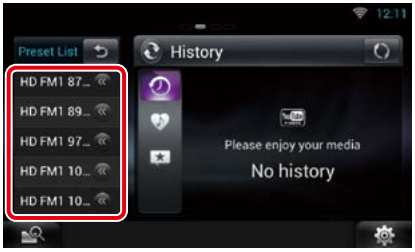
: Select the service on which you want to post the information.
Select the service, and then touch [OK].

: Returns to previous screen.

Preset select

1 Touch illustrated area.

2 Select a station or channel from the list.



Summary Board Widget

Summary Board Widget shows your favorite songs, the playback history of YouTube, the charts information, etc.

Preparation

- You must have a connection with the internet. See *Network Setup (P.32)*.
- You can use a user account when you have logged in the Owner or User.
- When the Trip log function is turned on, information about the played content is displayed. See *Trip log function (P.27)*.

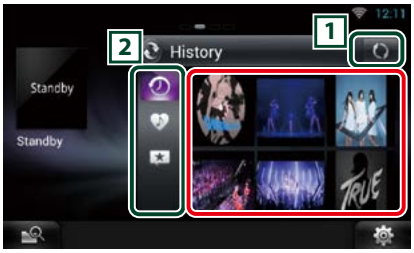
1 Press the <HOME> button.

2 Flick the screen left or right to select the Media panel.

3 Touch [ ].

4 Select the Summary Board Widget.

5 Touch desired item.



YouTube app starts and plays the song.

1

Update the history information.
: Switches to Photo frame.

2 Category

Select the service category.
: Displays the playback history of YouTube.
: Displays the list of your favorite songs that you saved (liked).
: Count the contents which users marked "Like" and list up.

(Like/ Recommend)

Show the search result by artist name and title on YouTube.

Photo Frame Widget

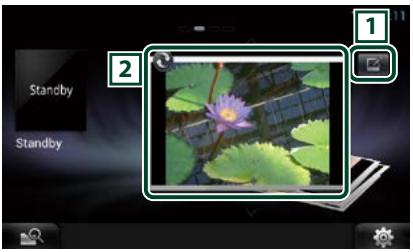
You can display the photos stored in the USB memory or SD card as a slide show.

1 Press the <HOME> button.

2 Flick the screen left or right to select the Media panel.

3 Touch [ ].

4 Select the Photo Frame Widget.



1 Edit

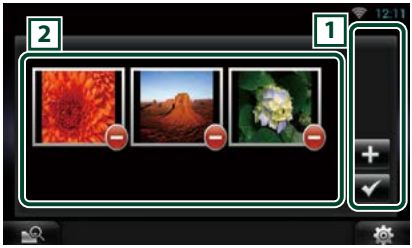
Edit the photo to be displayed.

2 Picture

Sliding the photo vertically scrolls through photos.
: Switches to Summary Board.

Select the photo you want to display.

1 **Touch [ ].**



1

: Displays the screen for selecting the photo to be added.

: Ends editing, and returns to the Photo frame screen.

2 **Thumbnail**

Touch and hold the photo. When the photo shaking, drag the photo to change the order.

: Deletes the photo from the list.

2 **Touch [ ].**

3 **Select a picture.**

4 **Touch [ ].**

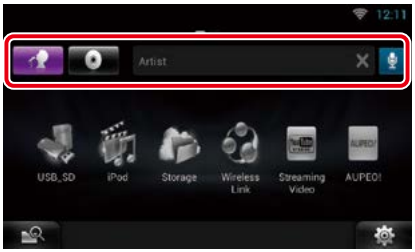
Mixed Media Search

You can search media like USB,iPod for the song by artist or album name and play it.

1 **Touch [ ].**

2 **Select whether you search for the song by artist name or album name .**

3 **Enter the Artist or Album.**



Enter the keyword using the voice recognition function. When "Speak now" is displayed, pronounce the keyword.

* You can use a user account when you have logged in the Owner or User.

4 **Select a Source.**

The source changes and playback starts.

DVD/Video CD (VCD) Operation

DVD/VCD Basic Operation

Most functions can be controlled from the source control screen and playback screen.

NOTE

- Set the remote controller mode switch to DVD mode before starting operation, see *Switching the operation mode (P.151)*.
- The screen shot below is for DVD. It may be different from the one for VCD.

Control screen

Playback screen

1 Information display

Displays the following information.

- **Title #, Chap #**: DVD title and chapter number display
- **Track #/Scene #**: VCD track or scene number display
  *Scene # is displayed only when PBC is on.
- ►, ►►, ►►I, ■, etc.: Current play mode display
  The meanings of each icon are as follows; ► (play), ►► (fast forward), ◄◄ (fast backward), ►►I (search up), I◄◄ (search down), ■ (stop), ■R (resume stop), ❚❚ (pause), ❚► (slow playback), ◄❚ (slow reverse playback).

Touch this area to display the disc lable name.

2 Multi function key

Touch to switch the multi function menu. For details on the menu, see *Multi function menu (P.62)*.

3 Multi function menu

Various functions can be operated using keys in this menu. For details on the keys, see *Multi function menu (P.62)*.

4 Control switching key

Unavailable in DVD/VCD source.

5 Sub function menu

The following functions can be performed by using keys in this area.

- **Repeats the current content**: Touch [ ]. Each time you touch the key, repeat mode switches in the following sequence;
  DVD: "title repeat" , "chapter repeat" , "function off"
  VCD (PBC On): Does not repeat
  VCD (PBC Off): "track repeat" , "function off"
- **Fast forward or fast backward**: Touch [◄◄] or [►►]. Each time you touch the key, the speed changes; standard, 2 times, 3 times.
- **For confirmation of play time**: See #:##:##.
  DVD: You can switch the time display between title play time, chapter play time, and title remaining time. Each time you touch, the display switches between "T #:##:##" (title play time display), "C #:##:##" (chapter play time display), and "R #:##:##" (title remaining time display).
  As well as the time display, the bar indicating current location appears.
  VCD (PBC off): You can also confirm disc remaining time by touching time display. Each time you touch, the display switches between "P ##:##" (play time display) and "R ##:##" (disc remaining time).
- **For confirmation of current playing position**:
  See the bar in center (DVD only). The bar does not appear while the remaining time is being displayed.

6 Movie display area

Touch to display Video screen.

7 Searching area

Touch to search the next/previous content.

Scrolling from center of display to left or right performs fast backward or fast forward. Each time you touch each area, the speed changes; standard, 2 times, 3 times. To stop fast backward/forward, touch center of the display.

8 Menu display area

This area functions differently depending on the current status.

- **During DVD playback**: Displays the Movie control screen. During the menu display, displays the highlight control screen.
- **During VCD playback**: Displays the Movie control screen. See *Zoom Control for DVD and VCD (P.64)*.

9 Key display area

Touch to display the last control screen.

10 Screen setup display area

Touch and hold to display the screen control screen. See *Monitor Screen Setup (P.130)*.

NOTE

- If you use a remote controller, you can jump directly to the desired video scene by entering the chapter number, scene number, play time, etc *Direct search mode (P.151)*.

Multi function menu

DVD

VCD

The functions of each key are as follows.

[|◄◄] [►►|]

Searches the previous/next content.

[►II]

Plays or pauses.

[◄I] or [I►] (DVD only)

Plays in slow motion forward or backward.

[■]

Stops playback. When touched twice, the disc is played from the beginning when you play it the next time.

[PBC] (VCD only)

Turn PBC on or off.

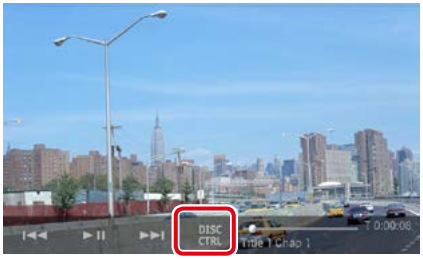
DVD Disc Menu Operation

You can set up some items in the DVD-VIDEO disc menu.

1 Touch illustrated area during playback.

Movie control screen appears.

2 Touch [Disc CTRL].



Menu Control screen appears.

3 Perform desired operation as follows.

Displays the top menu

Touch [Top].*

Displays the menu

Touch [Menu].*

Displays the previous menu

Touch [Return].*

Enters selected item

Touch [Enter].

Enables direct operation

Touch [Highlight] to enter the highlight control mode. See *Highlight control (P.63)*.

Moves the cursor

Touch [▲], [▼], [◄], [►].

*** These keys may not function depending on the disc.**

Highlight control

Highlight control lets you control the DVD menu by touching the menu key directly on the screen.

1 Touch [Highlight] in the Menu Control screen.

2 Touch desired item on the screen.

NOTE

- The highlight control is cleared automatically if you do not operate for a constant time.

DVD Play Mode Setting

You can select DVD play mode.

1 Touch [Next] in the Menu Control screen.

Menu Control 2 screen appears.

2 Touch the key which corresponds to desired setting item.

Switches the subtitle language

Touch [Subtitle]. Each time you touch this key, language is switched.

Switches the audio language

Touch [Audio]. Each time you touch this key, language is switched.

Controls zoom ratio

Touch [Zoom]. For details, see *step2 in Zoom Control for DVD and VCD (P.64)*.

Switches the picture angle

Touch [Angle]. Each time you touch this key, picture angle is switched.

Exits menu control

Touch [Exit].

Displays the Menu Control 1 screen

Touch [Previous].

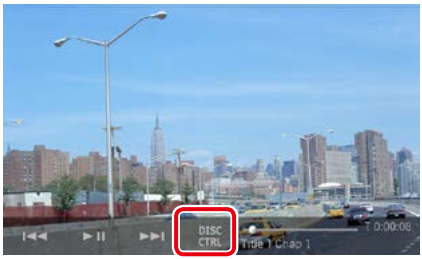
Zoom Control for DVD and VCD

You can enlarge Playback screen for DVD and VCD.

1 For VCD, touch illustrated area during playback.

Movie control screen appears.

2 Touch [Disc CTRL].



Zoom Control screen appears.

NOTE

- For DVD, please refer to *DVD Play Mode Setting (P.64)* to display the Zoom Control screen.

3 Perform desired operation as follows.

Switches zoom ratio

Touch [Zoom].

For DVD, changes the zoom ratio at 4 levels; Off, 2 times, 3 times, 4 times.

For VCD, changes the zoom ratio at 2 levels; Off, 2 times.

Scrolls the screen

Touch [▲], [▼], [◄], or [►] to scroll the screen in the direction you touch.

Exits menu control

Touch [Exit].

Displays the previous menu*

Touch [Return].

*** This function may not be performed depending on the disc.**

NOTE

- You cannot touch the menu keys directly on the screen when zooming.

DVD Setup

You can set up the DVD playback functions.

1 Touch [⚙].

Quick menu appears.

2 Touch [SETUP].

SETUP Menu screen appears.

3 Touch [Source].

Source SETUP Menu screen appears.

4 Touch [DVD SETUP] in the list.

DVD SETUP screen appears.

5 Set each item as follows.

Menu/Subtitle/Audio Language*

See *Language setup (P.66)*.

Dynamic Range Control*

Set the dynamic range.

Wide: The dynamic range is wide.

Normal: The dynamic range is normal.

Dialog (Default): Makes the total sound volume larger than other modes. This is effective only when you are using Dolby Digital software.

Angle Mark

Set an angle mark display.

ON (Default): An angle mark appears.

OFF: An angle mark does not appear.

Screen Ratio*

Set the screen display mode.

16:9 (Default): Displays wide pictures.

4:3 LB: Displays wide pictures in the Letter Box format (having black stripes at the top and bottom of screen).

4:3 PS: Displays wide pictures in the Pan & Scan format (showing pictures cut at the right and left ends).

Continued

Parental Level*

See *Parental level (P.67)*.

DISC SETUP

See *Disc setup (P.67)*.

Stream Information

Displays the present source information.

The stream (Dolby Digital, Linear PCM, MPEG, WMA or AAC) appears.

*** These items are disabled when a DVD is being played.**

Language setup

This setting is for the language used in the menu, subtitle, and voice. You cannot setup these items during DVD playback.

1 Touch [SET] of the desired item; [Menu Language], [Subtitle Language], [Audio Language].

Language Set screen appears.

2 Enter the desired language code and touch [Enter].

For language code, refer to *DVD Language Codes (P.164)*.

Sets the entered language and returns to the DVD SETUP screen.

NOTE

- To cancel the setup and return to the previous screen, touch [Cancel].
- To clear the entered code, touch [Clear].
- To set the DVD's original language for audio language, touch [Original].

Parental level

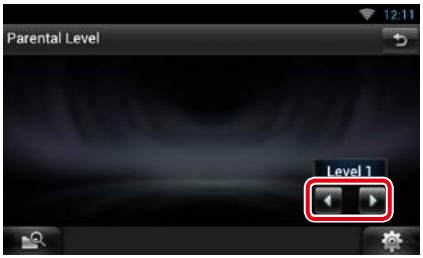
Set a parental lock level to prohibit children to watch video. You cannot set a parental lock level during DVD playback.

1 Touch [SET] of [Parental Level].
Parental Pass screen appears.

2 Enter the parental code and touch [Enter].
Parental Level screen appears.

NOTE
- To cancel the setup and return to the previous screen, touch [Cancel].
- To clear the entered code, touch [Clear].
- Current parental lock level appears as [Level#].

3 Touch [◄] or [►] to select a parental lock level.



NOTE
- If a disc has higher parental lock level, you need to enter the code number.
- The parental lock level varies depending on a loaded disc.
- If a disc has no parental lock, anybody can play it even though you have set the parental lock.

Disc setup

Performs setup when using disc media.

1 Touch [SET] of [DISC SETUP].
DISC SETUP screen appears.

2 Select an option as follows.

CD Read

Sets the motion of this unit when a music CD is played.

1 (Default): Automatically recognizes and plays an audio file disc, a DVD or a music CD.

2: Forcibly plays a disc as a music CD. Select [2] if you wish to play a music CD having a special format or if you cannot play a disc with the option [1] set..

On Screen DVD

Sets an on-screen display.

Auto: When updated, information appears for 5 seconds.

OFF (Default): Information does not appear.

NOTE
- [CD Read] is disabled when a disc is already in the unit.
- You cannot play an audio file/VCD disc with the option [2] set. Also, you may not play some music CDs with the option [2] set.

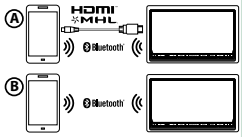
CD/Audio and Visual Files/iPod/Apps Operation

Music/Video Basic Operation

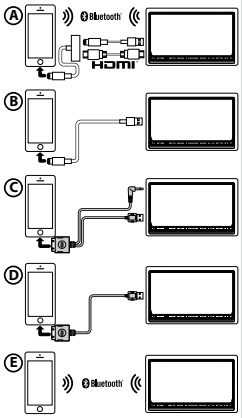
Most functions can be controlled from the source control screen and playback screen.

NOTE

- Set the remote controller mode switch to AUD mode before starting operation, see *Switching the operation mode (P.151)*.
- To connect the Android device with this unit, the cable (sold separately) and the profile which your Android device supports are necessary as follows:



  - Ⓐ To listen to music and watch video of APPS source
    - MHL device
    - KCA-MH100
    - Bluetooth profile: SPP
    - Application link setup: HDMI/MHL + BT
  - Ⓑ To listen to music of APPS source
    - Bluetooth profile: A2DP
    - Bluetooth profile: SPP
    - Application link setup: Bluetooth
  - Ⓒ To listen to music of Bluetooth Audio source *(P.121)*
    - Bluetooth profile: A2DP
    - Bluetooth profile: AVRCP
- To connect the iPod/iPhone with this unit, the cable, adapter (both sold separately), and the profile which your iPod/iPhone supports are necessary as follows:



  - Ⓐ To listen music and watch video with Lightning connector device
    - Lightning Digital AV Adapter
    - KCA-HD100
    - Lightning to USB Cable (accessory of the iPod/iPhone)
    - Bluetooth profile: SPP
    - iPod connection setup: HDMI + BT
  - Ⓑ To listen music with Lightning connector device
    - Lightning to USB Cable (accessory of the iPod/iPhone)
    - iPod connection setup: USB 1Wire
  - Ⓒ To listen music and watch video with 30-pin connector device (analog)
    - KCA-iP202
    - iPod connection setup: USB + AV-IN
  - Ⓓ To listen music with 30-pin connector device
    - KCA-iP102
    - iPod connection setup: USB 1Wire
  - Ⓔ To listen to music via Bluetooth
    - Bluetooth profile: A2DP
    - Bluetooth profile: SPP
    - iPod connection setup: Bluetooth
  - Ⓕ To listen to music of Bluetooth Audio source *(P.121)*
    - Bluetooth profile: A2DP
    - Bluetooth profile: AVRCP
- When connecting with Lightning Digital AV Adapter or Apple 30-pin Digital AV Adapter some applications can be controlled from this unit. The operable functions depend on the application.
- Do not leave the cable or the adapter made by other makers inside the car. It might lead the malfunction caused by heat.
- Some settings are necessary to meet the connected iPod/iPhone or Android device. See *iPod/iPhone connection setup (P.84)* or *Application link setup (P.85)*.

See the following sections for each source operation.

- **Music CD** *(P.69)*
- **Disc media** *(P.69)*
- **USB device** *(P.71)*
- **SD Card** *(P.71)*
- **iPod** *(P.71)*
- **Pandora** *(P.79)*
- **Apps** *(P.82)*

Music CD and disc media

NOTE

- In this manual, "Music CD" will be referred to as the general CDs which include music tracks in. "Disc media" will be referred to as CD/DVD disc which includes audio, picture or video files.
- The screen shot below is for CD. It may be different from the one for disc media.

1 Information display

Displays the following information.

- Track #: Each time you touch this area, display switches between current track number, text, etc.
- ►, ►►, ►►I, ■, etc.: Current play mode display
  The meanings of each icon are as follows; ► (play), ►► (fast forward), ◄◄ (fast backward), ►►I (search up), I◄◄ (search down), ■ (stop), ■R (resume stop), ❚❚ (pause).

2 Movie display area/Control switching area

Touch to switch between the Simple Control and List Control screen. (Only for Music file)

Touch to display Video screen. (Only for Video file)

3 Multi function key

Touch to switch the multi function menu. For details on the menu, see *Multi function menu (P.72)*.

4 Multi function menu

Various functions can be performed by using keys in this area. For details on the menu, see *Multi function menu (P.72)*.

5 Sub function key

Touch to display "Sub function menu" (7 in this table).

6 Track information

Displays the information of the current track.

For music CD and disc media, you can switch the current track information and the current folder list by touching the list switching key (8 in this table).

Continued

7 Sub function menu

Various functions can be performed by using keys in this area. For details on the keys, see Sub function menu (P.73).

8 Sub function/ List switching key

Touch to display "Sub function menu" (7 in this table).

Touch and hold to switch between the track list and the ID3 tag information (disc media only).

Playback screen (disc media only)

9 Searching file area (disc media only)

Touch to search the next/previous file.

Scrolling from center of display to left or right performs fast backward or fast forward. Each time you touch each area, the speed changes; standard, 2 times, 3 times. To stop fast backward/forward, touch center of the display.

10 Menu display area (disc media only)

Touch to display the Control screen. For details, see Movie Control (P.78).

11 Key display area (disc media only)

Touch to display the last control screen.

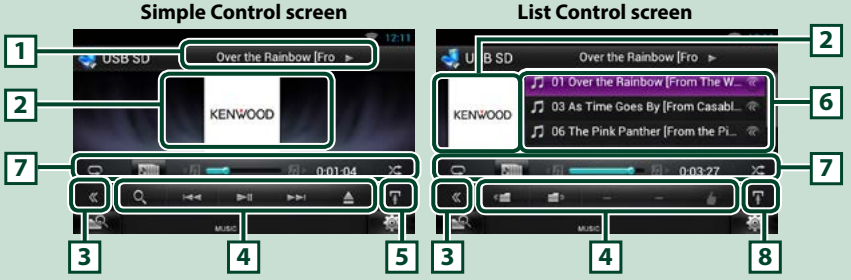
12 Screen setup display area

Touch and hold to display the screen control screen. See Monitor Screen Setup (P.130).

USB device, SD card and iPod

NOTE

- SD card is for DNN991HD only.
- The screen shot below is for USB device. It may be different from the one for iPod and SD card.



1 Information display

Displays the following information.

- Current file name: Each time you touch this area, display switches between file number/folder number and file name.
- ►, ►►, etc.: Current play mode display
  The meanings of each icon are as follows; ► (play, searching), ❚❚ (pause), ►► (forward manual search), ◄◄ (reverse manual search).

2 Artwork/Control switching area

Touch to switch between the Simple Control and List Control screen. (Only for Music file)

Touch to display Video screen. (Only for Video file)

3 Multi function key

Touch to switch the multi function menu. For details on the menu, see *Multi function menu (P.72)*.

4 Multi function menu

Various functions can be performed by using keys in this area. For details on the keys, see *Multi function menu (P.72)*.

5 Sub function key

Touch to display "Sub function menu" (7 in this table).

6 Content list

Displays the list and content. The content of the list differ depending on the playback status and source.

When you select the video source on the device connected with the Lightning connecter, the source is switched to Apps *(P.82)* automatically.

7 Sub function menu

Various functions can be performed by using keys in this area. For details on the keys, see *Sub function menu (P.73)*.

8 Sub function/ List switching key

Touch to display "Sub function menu" (7 in this table).

Touch and hold to switch between the file list and the current file information.

Continued

Playback screen

9 Searching file area (Video file only)

- Touch to search the next/previous file.
- During slide show in USB mode, touching each area searches the next/previous music file.
- Scrolling from center of display to left or right performs fast backward or fast forward. To stop fast backward/forward, touch center of the display. This function is not available when there is no music file in the current folder.

10 Movie control display area

Touch to display the Movie control screen. For details, see *Movie Control (P.78)*.

11 Key display area (Video file only)

Touch to display the last control screen.

12 Screen setup display area

Touch and hold to display the screen control screen. See *Monitor Screen Setup (P.130)*.

Multi function menu

Music CD

Disc media

iPod

USB device and SD card

The following functions can be performed by using keys in this area.

[ ] (Only for disc media, iPod, USB device, and SD card)

Searches track/file. For details on search operation, see *Search Operation (P.74)*.

[|◄◄] [►►|]

Searches the previous/next track/file.

[►II]

Plays or pauses.

[■] (Only for music CD and disc media)

Stops playback.

[⏏] (Only for iPod, USB device, and SD card)

Touch to disconnect the device. For details, see *How to Play Media (P.18)*.

[ ] [ ] (Only for disc media, USB device, and SD card)

Searches previous/next folder.

[ ] (Like) (Audio file only)

Saves the artist name and the title by pressing it while your favorite song is being played. After saving, you can search for the song and play it from the list of the Summary Board using YouTube. See *Summary Board Widget (P.58)*.

Sub function menu

Music CD

Disc media

iPod

USB device and SD card

The following functions can be performed by using keys in this area.

[ ]

Repeats the current track/folder. Each time you touch the key, repeat mode switches in the following sequence;

CD: "track repeat" , "repeat off"

iPod: "song repeat" , "all songs repeat" , "repeat off"

Disc media, USB device, SD card: "file repeat" , "folder repeat" , "repeat off"

[ ] (Only for iPod, USB device, and SD card)

Searches track from the album artwork list. For details on search operation, see *Search from album artwork (P.76)*.

[◄◄] [►►] (Only for music CD and disc media)

Fast forward or fast backward.

[ ] [ ] (Only for iPod, USB device, and SD card)

Plays the previous or next album in *Favorite list (P.77)*.

#:##:## or ##:##

For confirmation of play time.

During music CD playback, you can also confirm disc remaining time by touching time display. Each time you touch, the display switches between "P ##:##" (track play time display) and "R ##:##" (disc remaining time).

[ ]

Randomly plays all tracks in current folder/disc or in current playlist in the connected iPod.

Each time you touch the key, random mode switches in the following sequence;

CD: "track random" , "random off"

Disc media, USB device, SD card: "file random" , "random off"

iPod: "track random" , "album random" , "random off"

Status bar in center (Only for iPod, USB device, and SD card)

For confirmation of current playing position.

During USB device and iPod playback, you can drag the circle left or right to change the playing position.

Search Operation

You can search music or video files by the following operations.

NOTE

- If you use a remote controller, you can jump directly to the desired track/file with entering the track/folder/file number, play time, etc. For details, see *Direct search mode (P.151)*.

List search

You can search tracks, folders, and files according to hierarchy.

1 Touch illustrated area.

List Control screen appears.

2 Touch desired track/file.

Playback starts.

NOTE

- For disc media, you can switch the file list and folder list by touching [ ].
- For disc media, you cannot display the list during random play and stop.

Other search

There are other search methods in order to narrow search for a song.

This function is not available when music CD is the current source.

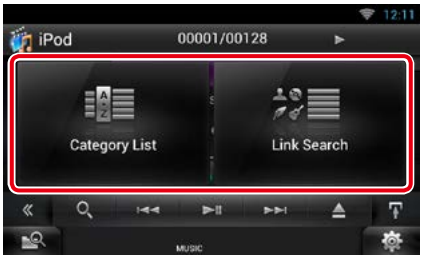
1 Touch [ ] in the control screen.

The search type screen appears.

2 Touch desired search method.

USB device and SD card

iPod



The list sorted in the way you selected appears.

See the following sections for each operation.

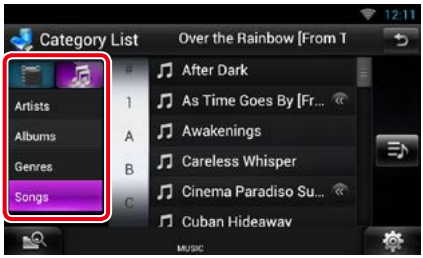
- **[Category List]: You can search a file by selecting category** *(P.75)***.**
- **[Link Search]: You can search a file of same artist/album/genre/composer as the current track** *(P.75)***.**
- **[Folder List]: You can search a file according to hierarchy** *(P.76)***.**

NOTE

- For disc media, you can display the folder list directly by touching [ ].

Category search (Only for iPod, USB device, and SD card)

1 Touch the desired category from the left part of the screen.



2 The list is sorted by selected category.

3 Touch desired song.

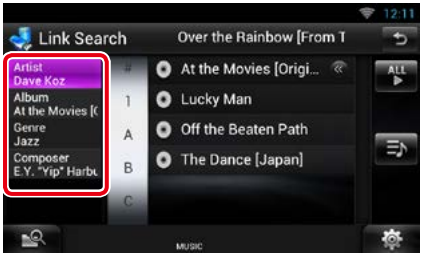
Playback starts.

NOTE

- To narrow the search you can select a letter from the alphabet list in the center of the display.
- For operations in the list screen, see ***Common Operation (P.24)***.

Link search (Only for iPod, USB device, and SD card)

1 Touch the desired link from the left part of the screen. You can select from artist, album, genre and composer.



The link list corresponding to your selection appears.

NOTE

- The list is sorted by the way you selected.
  - –**Artist**: Displays the album list of the artist.
  - –**Album**: Displays all tunes of the current album.
  - –**Genre**: Displays the artists list in which artists belong to the same genre.
  - –**Composer**: Displays the album list of the composer of the current file.

2 Touch to select desired item in the list. Repeat this step until you find the desired file.

NOTE

- To narrow the search you can select a letter from the alphabet list in the center of the display.
- For operations in the list screen, see ***Common Operation (P.24)***.

Folder search (Only for disc media, USB device, and SD card)

1 Touch the desired folder.

Folders in the selected source are displayed in the center.

When you touch a folder its contents are displayed.

The hierarchy till the current folder is displayed on the left.

2 Touch desired item from the content list.

Playback starts.

NOTE

- For operations in the list screen, see *Common Operation (P.24)*.

Search from album artwork (Only for iPod, USB device, and SD card)

You can search music files by selecting the album artwork.

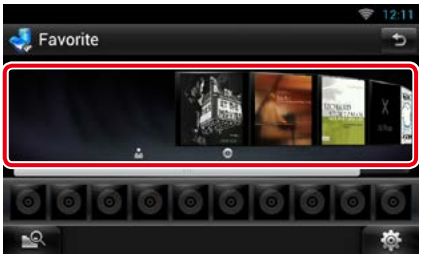
1 Touch [ ].

Sub function menu appears.

2 Touch [ ].

Favorite screen appears.

3 Touch desired artwork in the upper line.



NOTE

- The key in the upper side of the screen functions differently depending on the status.
  - –When [Load Albums] appears:
    You have not yet loaded any artwork. Touch the key to start loading.
  - –When [Load More Albums] appears:
    Some artwork are not loaded. Touch the key to load all artwork. If you touch the key, the track being played may stop and another track may start playback.
  - –When the key does not available:
    All artwork are already loaded.

4 Touch [►] on the selected artwork.

The first song in the album is played.

In addition, you can create your original playlist from this screen. For details, see *Favorite list (P.77)*.

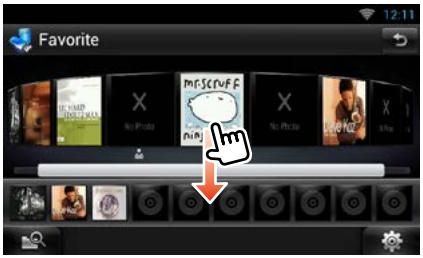
NOTE

- After all tracks in the album are played, the same album is played again from the first track.
- The albums with no photo are not displayed.

Favorite list

You can create an original playlist of your favorite 10 albums by selecting album artworks.

1 Touch and drag the desired album artwork in the upper line to the lower line.

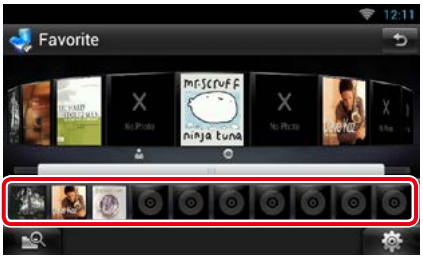


Selected album is registered to the favorite list.

NOTE

- The added album is placed on farthest right.
- You cannot register the same album already registered to the favorite list.
- Up to 10 albums can be registered to the list.

2 Touch the desired artwork in the favorite list.



The selected album is played and the control screen appears.

NOTE

- The favorite list is played to the right starting with the selected album.
- To delete the album from the favorite list, touch and drag it to the upper line.
- You can change the playing order of the favorite list by dragging the artwork in the list.
- The favorite list mode is canceled in the following situations.
  - Playing another album from other list (folder list, category list, etc.)
  - Playing another album by touching the artwork in the upper line in the artwork list screen.
- The favorite list mode resumes after disconnecting/connecting the device or turning on/off. File being played, playing time code, favorite list content, favorite list order, etc. resumes if file configuration of the device is not changed.

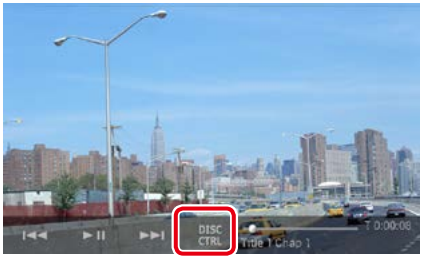
Movie Control

You can adjust the movie playback.

1 In the playback screen, touch illustrated area.

Movie control screen appears.

2 Touch [Disc CTRL]. (Disc media only)



Movie Control screen appears.

3 Perform desired operation as follows.

Changes subtitle language

Touch [Subtitle].

Changes audio language

Touch [Audio].

Exits the menu

Touch [Exit].

Pandora® Operation

You can listen to the Pandora® on this unit by controlling the application installed in the iPhone, Android or BlackBerry.

NOTE

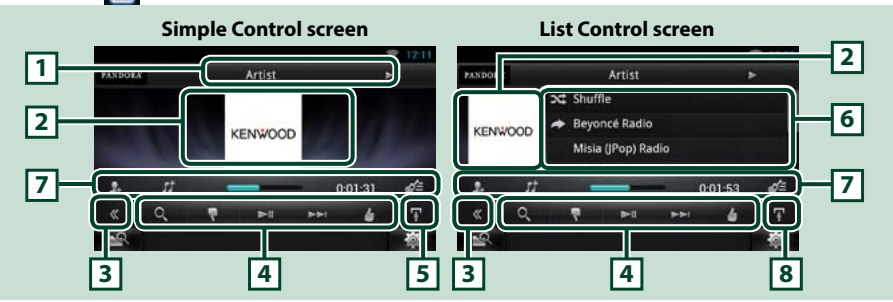
- Install the latest version of the Pandora® application on your iPhone, Android or BlackBerry. *(P.170)*
  iPhone: Search for "Pandora" in the Apple App Store to find and install the most current version.
  Android: Visit the Google Play and search for Pandora to install.
  BlackBerry: Visit www.pandora.com from the built in browser to download the Pandora application.
- When you first select Pandora as a source, the setting screen for the connection with the device installed the apps will appear. For the details, refer to *Application link setup (P.85)*.

1 Press the <HOME> button.

2 Flick the screen left or right to select the Source launcher panel.

3 Touch [ ].

4 Touch [Pandora].



1 Information display

Displays text information of current content that is being played.

2 Artwork/Control switching area

The artwork is displayed if available from current content. When the artwork is not available, "No Photo" is displayed.

Touch to switch between the Simple Control and List Control screen.

3 Multi function key

Touch to switch the multi function menu. For details on the menu, see *Multi function menu (P.80)*.

4 Multi function menu

Various functions can be performed by using the keys in this area. For details on the keys, see *Multi function menu (P.80)*.

5 Sub function key

Touch to display "Sub function menu" (7 in this table).

6 Content information

Displays the information of the current content being played.

Continued

7 Sub function menu

Various functions can be performed by using keys in this area. For details on the keys, see Sub function menu (P.80).

8 Sub function/ List switching key

Touch to display "Sub function menu" (7 in this table).

Touch and hold to switch between the content list and the current content information.

Multi function menu

The following functions can be performed by using keys in this area.

[ ]

Searches the station. For details on searching, see Station list screen (P.81).

[ ] (Thumbs down)

Thumbs down to the current track and skip to the next track.

[▶II]

Plays or pauses the content of the current station/channel.

[▶▶I]

Skips the current track.

(Note this function is disabled when the Pandora skip limitation is exceeded.)

[ ] (Thumbs up)

Registers the current content as favorite content.

Saves the artist name and the title by pressing it while your favorite track is being played. After saving, you can search for the track and play it from the list of the Summary Board using YouTube. See Summary Board Widget (P.58).

[ ] (Bookmark Artist)

Bookmark an artist in the current content.

[ ] (Bookmark track)

Bookmark a track in the current content.

Sub function menu

The following functions can be performed by using keys in this area.

Status bar in center

Displays the elapsed time since when you select the station and status bar which shows current location.

[ ]

Creates a new station based on an artist being played.

[ ]

Creates a new station based on a track being played.

[ ]

Displays the genre list screen. For details on searching, see Genre list screen (P.81).

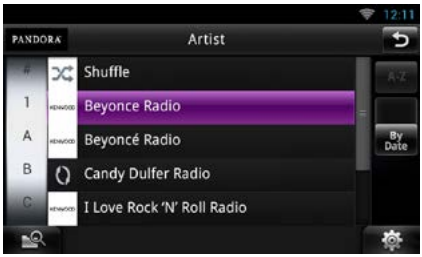
Genre list screen

You can perform the following functions from this screen.

The selected genre is created as a new station.

Station list screen

You can perform the following functions from this screen.



Selects the station

Touch the station name in the list.

Sort the list in alphabetical order

You can select the desired letter from the list which corresponds to the station name to help narrow the search.

Display the genre list

Displays the genre list.

Sort the list by date

Touch [ByDate]. The list is sorted to begin with the last registered station.

NOTE

- You can operate Pandora by using the remote controller. However, only playing, pausing, and skipping are available.
- You cannot select iPod as rear source when you select Pandora as main source in dual zone function.

Apps Operation

You can listen to music or watch video from the Apps operating on iPod touch/iPhone or Android.

NOTE

- When you first select APPS as a source, the setting screen for the connection with the device installed the apps will appear. For the details, refer to *Application link setup (P.85)*.

1 Press the <HOME> button.

2 Flick the screen left or right to select the Source launcher panel.

3 Touch [ ].

4 Touch [APPS].

NOTE

- When you turn on the power and select apps as the source, the caution for the operation, watching video and listening music appears. With your acceptance, you can control apps, listen to music and watch video from apps when you are driving.

10:35
CAUTION!
Some applications are not safe to operate while driving.
When controlling or viewing apps from a smartphone or other device, the driver's priority should be focused on observing and obeying all traffic rules.
Press Agree to accept that you will assume all responsibility and risk.
Agree
Cancel

1 [►] [II] (iPod only) / [►II]

Plays or pauses.

2 [I◄◄] [►►I]

Searches the previous/next file.

Touch and hold to fast backward/ forward. (iPod/ iPhone only)

3 Key display area

Touch to display the operation buttons. Touch again to erase them.

NOTE

- The operable functions depend on the application.

USB/SD/iPod/DivX/Apps Setup

You can perform setup when using USB/SD/ iPod/ DivX/ Apps.

1 Touch [⚙].
Quick menu appears.

2 Touch [SETUP].
SETUP Menu screen appears.

3 Touch [Source].

Source SETUP Menu screen appears.

4 Touch [USB SETUP], [iPod SETUP], [APPS SETUP] or [DivX VOD] in the list.
Each setup screen appears.
See the following section for each setting.

- *USB setup (P.83)*
- *iPod setup (P.84)*
- *Apps setup (P.85)*
- *DivX® VOD (P.87)*

USB setup

1 Set each item as follows.

On Screen USB

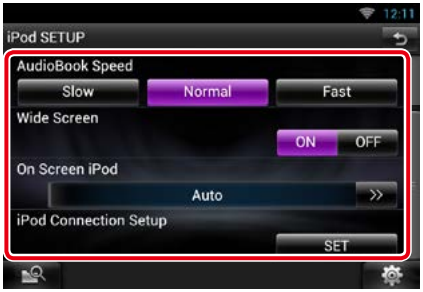
Set how information from a USB device or SD is displayed.

Auto (Default): Information appears for 5 seconds when updated.

OFF: Does not display any information.

iPod setup

1 Set each item as follows.



AudioBook Speed

Set the audio book playback speed. Select from [Slow], [Normal] (default), and [Fast].

Wide Screen*1

Set Wide Screen. Set [ON] (default) or [OFF].

On Screen iPod

Set how to display the information of the iPod.

Auto (Default): Information appears for 5 seconds when updated.

OFF: Does not display any information.

iPod Connection Setup*2

Sets the way to connect the iPod/iPhone with this unit.

***1 This setting is not available when an iPod is connected.**

***2 This item can be set when in STANDBY source.**

iPod/iPhone connection setup

1 Press the <HOME> button twice to the Source launcher panel.

2 Touch [ ].

3 Touch [STANDBY].

4 Touch [ ].

5 Touch [SETUP].

6 Touch [Source].

7 Touch [iPod SETUP].

8 Touch [iPod Connection Setup] in the iPod SETUP screen.

iPod connection setup screen appears.

9 Touch [CHANGE].

10 Set each item as follows.

USB + AV-IN

Select when connecting with KCA-iP202.

USB 1Wire

Select when connecting with KCA-iP102 or Lightning to USB Cable.

HDMI + BT

Select when connecting with KCA-HD100 and Lightning Digital AV Adapter.

Bluetooth

Select when connecting via Bluetooth only.

11 Touch [Next].

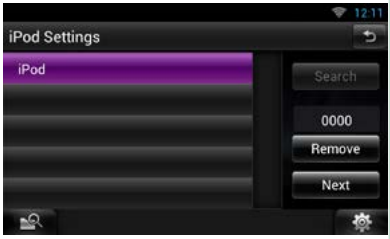
Confirmation screen appears.

12 Touch [Done].

13 Touch [ ].

NOTE

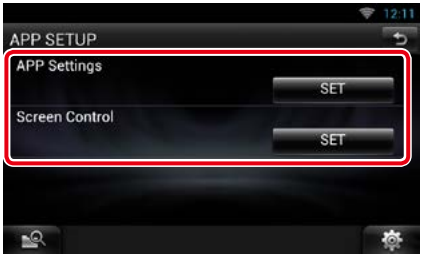
- For the details of the necessary cable and adapter to connect with iPod/iPhone, refer to ***Music/ Video Basic Operation (P.68)***.
- When you select "HDMI + BT" or "Bluetooth" in step 10, Bluetooth device selection screen will appear. Select the iPod/iPhone to be connected.



- If a connectable Bluetooth device is not displayed, touch [Search] and do the pairing of the devices.
- The setting of "iPod connection setup" is just for the unit and regardless of the account.

Apps setup

1 Set each item as follows.



APP Settings*

Makes the detailed setting of the device in which APPS are installed.

Screen Adjust

Touch [SET] to display the screen control screen. See ***Monitor Screen Setup (P.130)***.

*** This item can be set when in STANDBY source.**

Application link setup

1 Press the <HOME> button twice to the Source launcher panel.

2 Touch [ ].

3 Touch [STANDBY].

4 Touch [ ].

5 Touch [SETUP].

6 Touch [Source].

7 Touch [APPS SETUP].

8 Touch [SET] on [APP Settings] in the APPS SETUP screen.

Application link setup screen appears.

9 Touch [CHANGE].

10 Select the device installed the apps.

iPod/iPhone

Select when using iPod/iPhone.

Android/Other

Select when using Android or BlackBerry device.

11 Touch [Next].

Continued

12 Select the way to connect the device with this unit.

When selecting [iPod/iPhone]

USB + AV-IN

Select when connecting with KCA-iP202.

USB 1Wire

Select when connecting with KCA-iP102 or Lightning to USB Cable.

HDMI + BT

Select when connecting with KCA-HD100 and Lightning Digital AV Adapter.

Bluetooth

Select when connecting via Bluetooth only.

When selecting [Android/Other]

HDMI/MHL + BT

Select when connecting with KCA-MH100.

Bluetooth

Select when connecting via Bluetooth only.

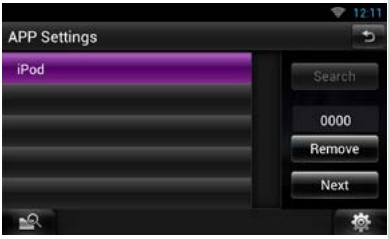
13 Touch [Next].

Confirmation screen appears.

14 Touch [Done].

NOTE

- For the details of the necessary cable and adapter to connect with iPod/iPhone and Android device, refer to *Music/Video Basic Operation (P.68)*.
- When you select "HDMI + BT", "HDMI/MHL + BT" or "Bluetooth" in step 12, Bluetooth device selection screen will appear. Select the device to be connected.



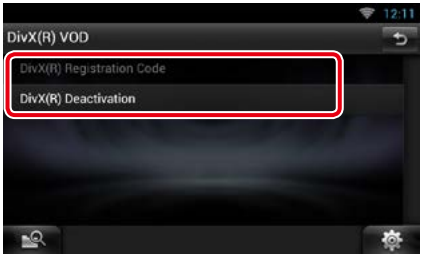
If a connectable Bluetooth device is not displayed, touch [Search] and do the pairing of the devices.

- When you select "iPod/iPhone" in Apps Setup, select "iPod" as the source, and select App on the iPod, the source of this unit is also changed to App automatically.
- The setting of "Application link setup" is just for the unit and regardless of the account.

DivX® VOD

This feature is available only for Central and South America sales area.

1 Set each item as follows.



DivX(R) Registration Code

Checks the registration code. This code is needed when making a disc which has DRM (Digital Rights Management).

DivX(R) Deactivation

Deregisters the unit which is already registered. After you touch the key, a confirmation message appears. Follow the message and complete the operation.

NOTE

- [DivX(R) Registration Code] is disabled when a DVD is being played.
- When downloading a DivX VOD file controlled by DRM, register the code appeared on the screen. Otherwise the file may not be able to play with this unit. Remaining number of viewing is displayed when playing a DivX VOD file with the viewing restriction. When the remaining number of viewing reached 0, a warning message appears and the file cannot be played.

Cloud Storage Operation

Starting procedure

Make preparations for allowing this unit to play the music files uploaded to Dropbox.

Preparation

- You must have a connection with the internet. See *Network Setup (P.32)*.
- You can use a user account when you have logged in the Owner or User.
- To use this service, a Dropbox account is required.

1 Upload music files to Dropbox.

2 In the Route Collector site, create a folder and playlist of the files to be played.

For how to set the folder and playlist of the files to be played, refer to the website.

http://www.route-collector.com/

Available content

Content that can be delivered or played by this unit are as follows:

- Audio file: MP3 (.mp3), AAC-LC (.m4a/ .aac), WMA (.wma), WAV (.wav), FLAC (.flac)
- Copyrighted content cannot be played.

Music Basic Operation

The music files uploaded to Dropbox can be played.

Preparation

- To play the files uploaded to Dropbox, setting is required. See *Starting procedure (P.88)*.

1 Press the <HOME> button.

2 Flick the screen left or right to select the Source launcher panel.

3 Touch [ ].

4 Touch [Storage].

[▶II]

Plays or pauses.

[I◀◀] [▶▶I]

Searches the previous/next file.

[ ]

Searches file. For details on search operation, see *Category search (P.89)*.

[ ] (Like)

Saves the artist name and the title by pressing it while your favorite song is being played. After saving, you can search for the song and play it from the list of the Summary Board using YouTube. See *Summary Board Widget (P.58)*.

[ ]

The data base like the song information in the server is reorganized. Press it when you change the file in the Dropbox.

[ ]

Touch to switch the multi function menu.

[ ]

Touch to display "Sub function menu".

Touch and hold to switch between the file list and the current file information.

[ ]

Repeats the current file. Each time you touch the key, repeat mode switches on or off.

[ ]

Randomly plays all files in current folder or in current playlist.

Each time you touch the key, random mode switches in the following sequence;

"file random" , "random off"

#:##:##

For confirmation of play time.

Status bar in center

For confirmation of current playing position. You can drag the circle left or right to change the playing position.

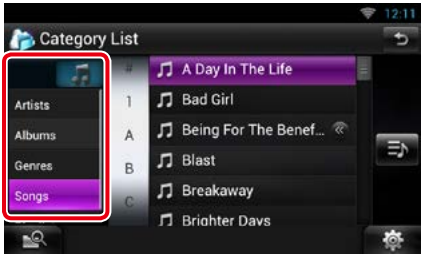
Category search

You can search music files by the following operations.

1 Touch [ ] in the control screen.

The search type screen appears.

2 Touch the desired category from the left part of the screen.



3 The list is sorted by selected category.

4 Touch desired music file.

Playback starts.

NOTE

- To narrow the search you can select a letter from the alphabet list in the center of the display.
- For operations in the list screen, see Common Operation (P.24).

Kenwood Wireless Link Operation

Starting procedure

By using the Wi-Fi function, media files can be shared with another media server device or client (player) device.

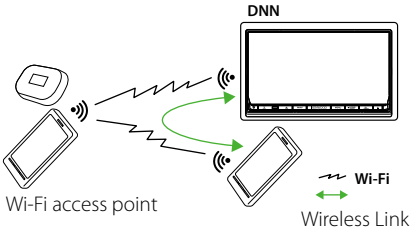
Preparation

- Turn on the function of Wi-Fi connection to a media server device or client device.

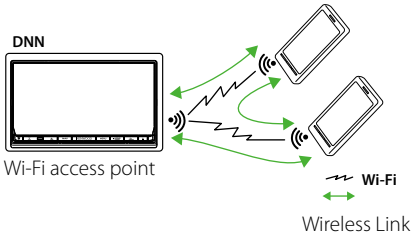
About Network connection

There are two types of network to connect to the media server device or the client (player) device.

- **Wi-Fi access:** The internet device that becomes the Wi-Fi access point is necessary. Smartphone and tablet PC can be connected through the Wi-Fi access point. See *Wi-Fi Setup (P.32)*.
  – You cannot listen to music or watch video in the smartphone when its tethering function is in use.



- **Wi-Fi hotspot**: This unit becomes the Wi-Fi access point and can connect with smartphone and tablet PC. See *Wi-Fi Hotspot Setup (P.34)*.



Media Server function

Plays the content stored in the USB memory or SD card connected to this unit via another network media player (client device).

- We confirmed normal operation using the following network media players (software):
- Windows Media Player 12

Media Player function

Plays the content stored in another media server device via this unit.

- We confirmed normal operation using the following media servers (software):
- Windows Media Player 12

Media Controller function

Allows you to handle the content stored in another media server device via this unit and play them on another network media player (client device).

Media Renderer function

Plays the content being operated on another media controller through this unit.

Available content

Content that can be delivered or played by this unit are as follows:

- Audio file: MP3 (.mp3), AAC-LC (.m4a/ .aac), WMA (.wma), WAV (.wav), FLAC (.flac)
- Video file: MPEG-1/2 (.mpg/ .mpeg/ .m2p), MPEG-4 (.mp4/ .m4v), WMV (.wmv/ .m2ts), MKV (.mkv)
- Copyrighted content cannot be played.

Media Server function

Plays the content stored in the USB memory or SD card connected to this unit via another network media player (client device).

1. **Press the <HOME> button.**
2. **Flick the screen left or right to select the Source launcher panel.**
3. **Touch [ ].**
4. **Touch [Wireless Link].**
5. **Touch [DMS].**

The server function is turned on.

6. **Connect from the client device.**

Operate the client device to connect to the server.

Server name: DNN991HD or DNN9710BT.

Media Player function

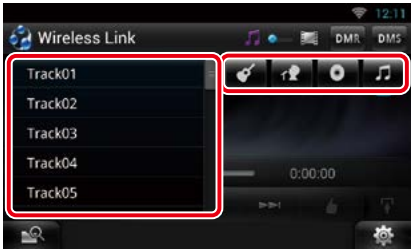
Plays the content stored in another media server device via this unit.

1. **Press the <HOME> button.**
2. **Flick the screen left or right to select the Source launcher panel.**
3. **Touch [ ].**
4. **Touch [Wireless Link].**
5. **Connect to the media server.**

A list of detected media servers is displayed.

Touch the server name of the server to connect.

6. **Select the content to play.**



Select the category of the content to play.

A list of detected content is displayed.

Plays screen

[▶II]

Plays or pauses.

[I◀◀] [▶▶I]

Searches the previous/next file.

[ ] (Like) (music file only)

Saves the artist name and the title by pressing it while your favorite song is being played. After saving, you can search for the song and play it from the list of the Summary Board using YouTube. See *Summary Board Widget (P.58)*.

[ ]

Repeats the current file. Each time you touch the key, repeat mode switches on or off.

[ ]

Switches between music and video files.

#:##:## or ##:##

For confirmation of play time.

Status bar in center

For confirmation of current playing position. You can drag the circle left or right to change the playing position.

[ ]

Touch to display "Sub function menu".

Touch and hold to switch between the file list and the current file information.

Media Controller function

Allows you to handle the content stored in another media server device via this unit and play them on another network media player (client device).

1 Press the <HOME> button.

2 Flick the screen left or right to select the Source launcher panel.

3 Touch [ ].

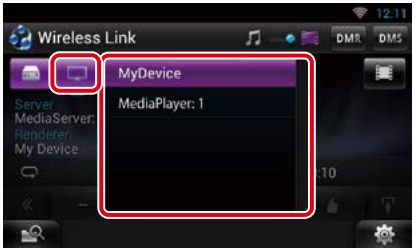
4 Touch [Wireless Link].

5 Connect to the media server.

A list of detected media servers is displayed.

Touch the server name of the server to connect.

6 Select a network media player to be used for playback.



A list of detected network media players is displayed.

Touch the name of the network media player to be used for playback.

Media Renderer function

Plays the content being operated on another media controller through this unit.

1 Press the <HOME> button.

2 Flick the screen left or right to select the Source launcher panel.

3 Touch [ ].

4 Touch [Wireless Link].

5 Touch [DMR].

The Rendering function is turned on.

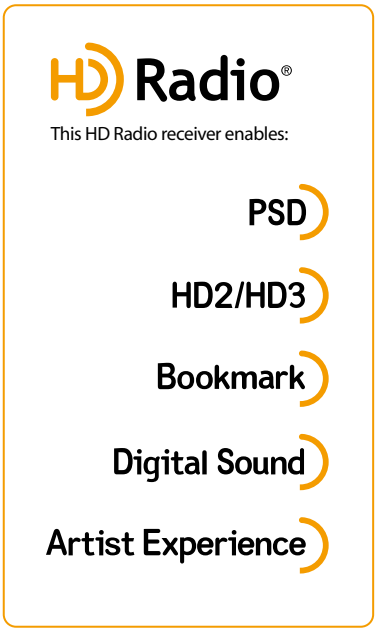
6 Establish connection from the media controller.

Operate the media controller to connect to this unit.

This unit:DNN991HD or DNN9710BT.

Radio, HD Radio™ tuner Operation

About HD Radio™ Technology



PSD

- Program Service Data provides song name, artist, station ID, and other relevant data streams

HD2/HD3

- Adjacent to traditional main stations are HD2/HD3 Channels, providing new original formats on the FM dial

Bookmark

- Bookmark is a music & product discovery feature that enables users to store information about content on the radio and delivers interactive information via QR codes

Digital Sound

- HD Radio broadcasts deliver crystal clear, CD-like digital audio quality to consumers

Artist Experience

- Visual images, such as album art of over-the-air broadcasts from HD Radio stations

Radio/ HD Radio tuner Basic Operation

Most functions can be controlled from the source control screen.

NOTE

- Set the remote controller mode switch to AUD mode before starting operation, see *Switching the operation mode (P.151)*.
- HD Radio broadcasting can be received only by the DNN991HD.
- HD Radio broadcasting is for North American sales area only.
- The screen shot below is for tuner. It may be different from the one for HD Radio broadcasting.

1 PS/Station name display

Displays the PS name or station name.

2 Information display/Control switching area

Displays the following information.

- **Picture:** The picture data or station Logo data is displayed if available from current content.
- **[FM1] etc.**: Band display
- **MHz/kHz**: Frequency display
- **Preset #**: Preset number
- **HD# (HD Radio tuner only)**: Channel display

Touch to switch between the Simple Control and List Control screen.

3 Multi function key

Touch to switch the multi function menu. For details on the menu, see *Multi function menu (P.96)*.

4 Preset key/Multi function menu

Recalls the memorized station or channel. When touched for 2 seconds, stores the current receiving station or channel in memory.

When switched, various functions can be performed by using keys in this area.

For details on the menu, see *Multi function menu (P.96)*.

5 Sub function key

Touch to display "Sub function menu" (7 in this table).

Continued

6 Preset list

Displays the list of preset stations or channels and the information.

7 Sub function menu

The following functions can be performed by using keys in this area.

- **Switches the band**: Touch [AM] or [FM].
- **Tunes in a station**: Touch [|◄◄] [►►|]. The method of frequency switching can be changed. See Seek mode.
- **Selects a channel (HD Radio tuner only)**: Touch [CH ▼] or [CH ▲].
- **Stores the information about the song being received**: Touch [♫]. See ***Bookmark (P.100)***.
- **Tunes in by entering direct number (HD Radio tuner only)**: Touch [⊞] and enter the desired number. For details, see ***Direct search (P.98)***.

The bar in center (tuner only) shows the current frequency location.

8 Sub function/ List switching key

Touch to display "Sub function menu" (7 in this table).

Touch and hold to switch between the preset list and the information list.

In HD Radio tuner mode, tuned program information will be displayed.

Multi function menu

The functions of each key are as follows.

[P1] - [P6]

Select the preset station. Touch for 2 seconds to store the current station into the preset memory.

[🔍]

Select search method from preset station selection, channel selection or bookmark selection. For details on search operation, see ***Selecting Operation (P.97)***, ***Bookmark (P.100)***.

[TI] (FM Tuner and HD Radio tuner only)

Sets the traffic information mode on. For details, see ***Traffic Information (P.99)***.

[SEEK]

Switches the seek mode in the following sequence; [AUTO1], [AUTO2], [MANUAL].

- AUTO1: Tunes in a station with good reception automatically.
- AUTO2: Tunes in stations in memory one after another.
- MANUAL: Switches to the next frequency manually.

[AME]

Selects the auto memory mode. For details, see ***Auto memory (P.97)***.

[RCV] (HD Radio tuner only)

Switches the receive mode in the following sequence; [AUTO], [DIGITAL], [ANALOG]. For details, see ***Receive Mode (P.100)***.

[PTY] (FM Tuner and HD Radio tuner only)

Searches a program by setting program type. For details, see ***Search by program type (P.98)***.

[👍] (Like)

Saves the artist name and the title by pressing it while your favorite song is being played. After saving, you can search for the song and play it from the list of the Summary Board using YouTube. See ***Summary Board Widget (P.58)***.

Memory Operation

Auto memory

You can automatically store stations with good reception to memory.

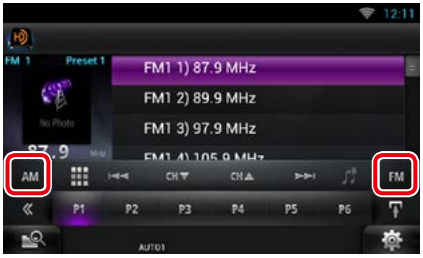
NOTE

- Auto memory terminates when 6 stations are stored or when all stations are tuned in.
- Auto memory ends automatically if you do not operate within 10 seconds.

1 Touch [ ].

Sub function menu appears.

2 Touch desired band key.



3 Touch [ ] in the control screen.

The multi function menu appears.

4 Touch [AME] in the multi function menu.

5 Touch [◄◄] or [►►] in the sub function menu.

Auto memory starts.

Manual memory

You can store the current receiving station or channel in memory.

1 Select a station or channel you wish to store in memory.

2 Touch [P#] (#:1-6) in which you want to store the station or channel for 2 seconds until a beep sounds.

Selecting Operation

Preset select

You can list and select memorized station or channel.

Selecting from the multi function menu

1 Touch the desired number from P1 to P6.

The unit will tune to the selected station or channel.

Selecting from the preset list

1 Touch illustrated area.

List Control screen appears.

2 Touch and hold [ ].

Preset list appears.

3 Select a station or channel from the list.

NOTE

- Touching [ ] and then [Preset List] displays the preset channel list. You can also select your desired channel from the list.

Search by program type

You can tune to a station with a specific program type when listening to FM.

1 Touch [ ] in the control screen.
The multi function menu appears.

2 Touch [PTY] in the multi function menu.
TUNER PTY Mode screen appears.

3 Select a program type from the list.

4 Touch [Search].

You can search a station of the selected program type.

Direct search (HD Radio tuner only)

You can tune in by entering the desired frequency or channel number.

1 Touch [ ].

10Key Direct screen appears.

2 Enter the frequency/ channel number and touch [Enter].

NOTE

- To cancel the direct search, touch [Cancel].
- To clear the number you entered, touch [Clear].
- For HD Radio tuner, you can search by frequency. Each time you touch [Mode] in the left part of the screen, it changes the mode between frequency entering mode and channel entering mode.

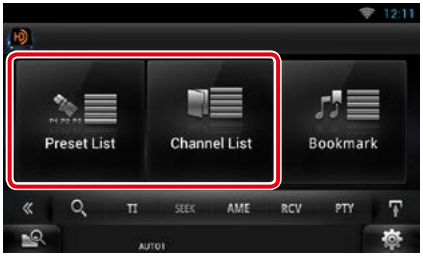
Category/Channel search (HD Radio tuner only)

You can specify the desired category and select a channel.

1 Touch [ ] in the control screen.
The multi function menu appears.

2 Touch [ ] in the multi function menu.
The list type screen appears.

3 Touch [Preset List] or [Channel List].



The previously used category or channel list appears.

4 Select the desired content from the list.

NOTE

- Each time you touch [Info Change] in the channel list, switches the sequence of the list.
  Song title, artist name, album name

Traffic Information (HD Radio tuner only)

You can listen and watch the traffic information automatically when a traffic bulletin starts.

However, this feature requires a Radio Broadcast Data System that includes the TI information.

1 Touch [ ] in the control screen.
The multi function menu appears.

2 Touch [TI] in the multi function menu.
Traffic information mode is set.

When the traffic bulletin starts

The Traffic Information screen appears automatically.

NOTE

- It is necessary to have Traffic Information function set to on in order to have the Traffic Information screen appear automatically.
- The volume setting during reception of traffic information is automatically stored. The next time the traffic information is received, this unit recalls the volume setting automatically.

Receive Mode (HD Radio tuner only)

You can set the radio broadcasts receive mode.

1 **Touch [ ] in the control screen.**
The multi function menu appears.

2 **Touch [RCV] in the multi function menu.**
HD Radio tuner Mode screen appears.

3 **Select the receive mode from [Auto], [Digital], and [Analog] using [◄] and [►].**

NOTE
- If you select [Auto], tunes to analog broadcast automatically when there is no digital broadcast.

Bookmark

Stores tag information (title, artist, album, URL, and description) about the song you are listening to now.
Detailed information and QR codes can be displayed according to the stored tag information.

Registering a bookmark

1 **Touch [ ].**
Sub function menu appears.

2 **Touch [ ].**
Registers a bookmark.

NOTE
- Up to 100 bookmarks can be registered to this unit.

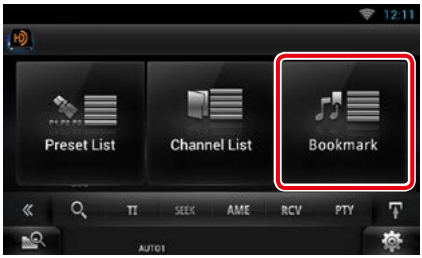
Bookmark list

Displaying a list of registered bookmarks and detailed information and QR code of the song.

1 **Touch [ ] in the control screen.**
The multi function menu appears.

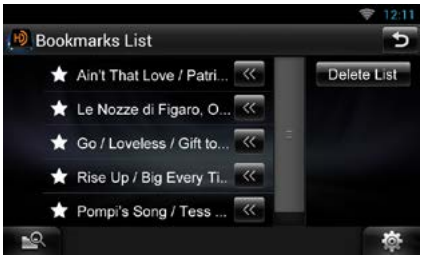
2 **Touch [ ] in the multi function menu.**
The list type screen appears.

3 **Touch [Bookmark].**



The Bookmark List appears.

4 Select the desired bookmark from the list.


Bookmarks List
Ain't That Love / Patri...
Le Nozze di Figaro, O...
Go / Loveless / Gift to...
Rise Up / Big Every Ti..
Pompi's Song / Tess ...
Delete List

The bookmark infomation appears.

[ ]

Deletes the bookmarks being displayed.

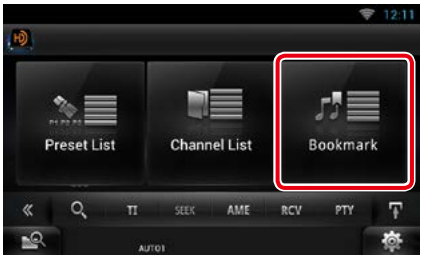
Bookmark delete

Deleting a bookmark.

1 Touch [ ] in the control screen.
The multi function menu appears.

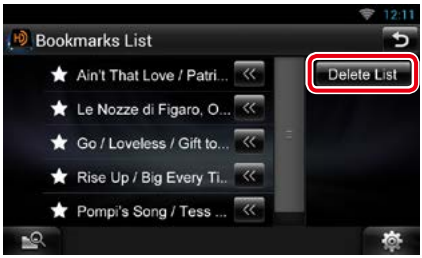
2 Touch [ ] in the multi function menu.
The list type screen appears.

3 Touch [Bookmark].



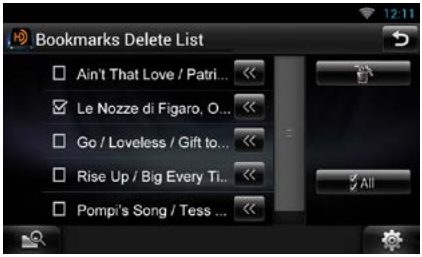
The Bookmark List appears.

4 Touch [Delete List].


Bookmarks List
Ain't That Love / Patri...
Le Nozze di Figaro, O...
Go / Loveless / Gift to...
Rise Up / Big Every Ti..
Pompi's Song / Tess ...
Delete List

The Bookmark Delete List appears.

5 Select the bookmark to delete from the list.


Bookmarks Delete List
Ain't That Love / Patri...
Le Nozze di Figaro, O...
Go / Loveless / Gift to...
Rise Up / Big Every Ti..
Pompi's Song / Tess ...
All

All

Select all bookmarks.

6 Touch [ ].
Deletes all the selected bookmark(s)

SiriusXM® Satellite Radio Operation (DNN991HD)

SiriusXM® Basic Operation

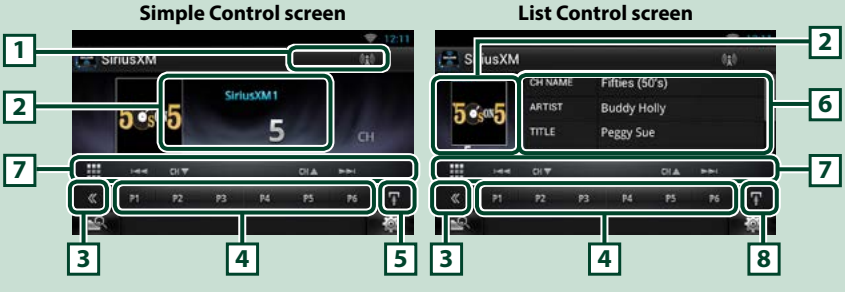
Most functions can be controlled from the source control screen.

Before use

- SiriusXM Satellite Radio operation requires the connection of the optional SiriusXM Connect Vehicle Tuner. To activate the SiriusXM Vehicle Connect tuner, you will need the Radio ID.
- **Make a note of your Radio ID:** To confirm your Radio ID, tune to channel 0. The letters I, O, S and F are not used in any Radio ID. The Radio ID is also located on the label of the SiriusXM Connect Vehicle Tuner.
- **How to activate your SiriusXM Service:** Go to www.siriusxm.com/activatenow or call 1-866-635-2349 to activate your SiriusXM Vehicle Connect Tuner.
  To activate SiriusXM Canada service go to www.xmradio.ca and click on "ACTIVATE RADIO" in the top right corner, or call 1-877-438-9677

NOTE

- Set the remote controller mode switch to AUD mode before starting operation, see *Switching the operation mode (P.151)*.
- To use SiriusXM® Satellite Radio, the optional accessory is necessary.
- SiriusXM® Satellite Radio are for North American sales area only.



1 Signal Strength indication

Displays the received signal strength of the SiriusXM tuner.

2 Information display/Control switching area

Displays the following information.

- [SiriusXM1], etc.: Band display
- Preset #: Preset number
- #CH: Channel display
- Logo: Channel logo display

Touch to switch between the Simple Control and List Control screen.

3 Multi function key

Touch to switch the multi function menu. For details on the menu, see *Multi function menu (P.104)*.

4 Preset key/Multi function menu

Recalls the memorized channel. When touched for 2 seconds, the current channel being received is stored to the memory.

When switched, various functions can be performed by using keys in this area.

For details on the menu, see *Multi function menu (P.104)*.

5 Sub function key

Touch to display "Sub function menu" (7 in this table).

6 Information list

Displays information about the current music being played: Channel Name, Artist Name, Song Title, Content Info, Category Name, Channel Description, Similar Channels

7 Sub function menu

The following functions can be performed by using keys in this area.

- Tunes in a station: Touch [CH▼] [CH▲].
- Searches the previous/next track: Touch [I◄◄] [►►I]. Fast forward/fast backward when keep on touching. See *SiriusXM Replay™ (P.108)*.
- Tunes in by entering direct number: Touch [▦] and enter the desired number. For details, see *Direct search (P.106)*.

8 Sub function/ List switching key

Touch to display "Sub function menu" (7 in this table).

Touch and hold to switch between the preset list and the information list.

Multi function menu

The functions of each key are as follows.

[P1] - [P6]

Select the preset channel. Touch for 2 seconds to store the current station into the preset memory.

[ ]

Select search method from preset channel selection or category/channel search. For details on search operation, see *Selecting Operation (P.105)*.

[▶II]

Plays or pauses. See *SiriusXM Replay™ (P.108)*.

[SEEK]

Switches the seek mode in the following sequence; [SEEK1], [SEEK2].

- SEEK1: Tunes channels one after the other.
- SEEK2: Selects channels in preset (memory) one after the other.

[BAND]

Switches the band.

[ ]/[ ]

Touch for 2 seconds to register content as Alert content.

- [ ]: Registers the artist of the song you are listening to now as alert content.
- [ ]: Registers the song you are listening to now as alert content.

For details, see *Content Alert (P.107)*.

[ ]

Turns the Traffic & Weather Jump function on or off.

For details, see *City select for Traffic & Weather Jump (P.113)*.

[ ]

Listen to the on-air song (live).

[TUNE SCAN]

Plays samples from the starts of multiple buffered songs from each of the Smart Favorite channels that predominantly play music selections. See *TuneScan™ (P.109)*.

[ ] (Like)

Saves the artist name and the title by pressing it while your favorite song is being played. After saving, you can search for the song and play it from the list of the Summary Board using YouTube. See *Summary Board Widget (P.58)*.

Memory Operation

Manual memory

You can store the current receiving station or channel in memory.

1 Select a station or channel you wish to store in memory.

2 Touch [P#] (#:1-6) in which you want to store the station or channel for 2 seconds until a beep sounds.

Selecting Operation

Preset select

You can list and select memorized station or channel.

Selecting from the multi function menu

1 Touch the desired number from P1 to P6.

The unit will tune to the selected station or channel.

Selecting from the preset list

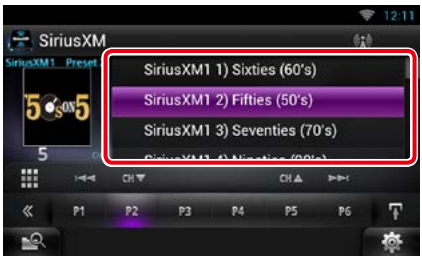
1 Touch illustrated area.

List Control screen appears.

2 Touch and hold [ ].

Preset list appears.

3 Select a station or channel from the list.



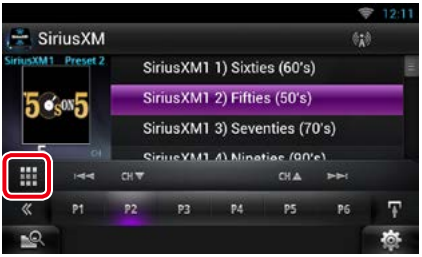
NOTE

- Touching [ ] and then [Preset List] displays the preset channel list. You can also select your desired channel from the list.

Direct search

You can tune in by entering the desired frequency or channel number.

1 Touch [ ].



10Key Direct screen appears.

2 Enter the frequency/ channel number and touch [Enter].

NOTE

- To cancel the direct search, touch [Cancel].
- To clear the number you entered, touch [Clear].

Category/Channel search

You can specify the desired category and select a channel.

1 Touch [ ] in the control screen.
The multi function menu appears.

2 Touch [ ] in the multi function menu.
The list type screen appears.

3 Touch [Category List].

The previously used category or channel list appears.

4 Select the desired content from the list.

NOTE

- All the channels in the selected category appear.
- Touching [All Channels] displays all the channels.
- Each time you touch [Info Change] in the channel list, switches the sequence of the list.
  Channel name, artist name, song title, category name, content info

Content Alert

When a broadcast program related to the registered artist, song, team or city starts, a message appears to allow you to switch the current channel to the relevant channel.

1 When the broadcast of the registered content starts, an Alert screen appears.

Jump

Touch to display the Alert Content List screen.

Ignore

Touch to cancel the Content alert.

2 Select content from the list.

12:11
Content Alerts
CH 14:Shut Up And Drive ('07)/Bluegrass Ju...
CH 16:Firework/The Highway
CH 18: Are You Ready?/Elvis Radio
CH 7:Love You Inside Out (79)/70s on 7
CH 9:Still Not A Player ('98)/90s on 9
CH 8:Hello Again ('84)/80s on 8
TITLE
Type

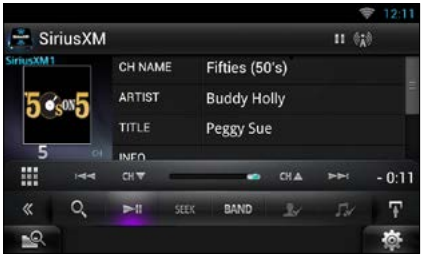
NOTE

- Each time you touched [Type], switches the sequence of the Content alert list as follows; Artist alert, Song alert, GameAlert™.
- For how to register artists and songs and turn on/off the Team alert function, see ***Multi function menu (P.104)***.
- For how to set up the Content alert function, see ***SiriusXM Setup (P.110)***.

SiriusXM Replay™

You can replay up to the last 60 minutes broadcasting of current channel

1 Simple Control screen or List Control screen.



Multi function menu

[▶II]

Plays or pauses.

[BAND]

Switches the band.

[ ]

Listen to the on-air song (live).

[ ]

Displays a list of recorded data on a program basis when a broadcast is replaying.

Sub function menu

[I◀◀] [▶▶I]

Searches the previous/next track. Fast forward/ fast backward when keep on touching.

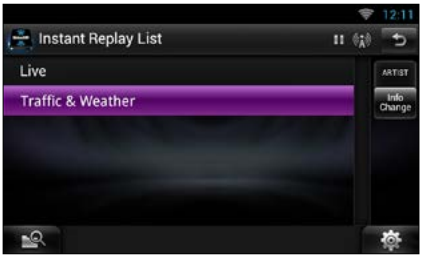
[CH▼] [CH▲]

Tunes in a station.

Replay time bar

Display recorded capacity and playback position.

2 Touch [ ] to display a program list.



Program list

Touching this plays back the displayed program.

[Info Change]

Touching this allows you to switch among the Artist name, Song title, Category name, and Content info cyclically.

Smart Favorites, TuneStart™

Station memory number 1 though 6 of current band are Smart Favorite channels. SiriusXM Vehicle Tuner automatically buffered the broadcast audio content of the Smart Favorites channels in the background.

You can rewind and replay up to 30 minutes of any of the missed news, talk, sports or music content when you tune to a Smart Favorite channel. (see *SiriusXM Replay™ (P.108)*)

When tuning Smart Favorites channels, songs will play from the beginning of each track (Tune Start). You can enable/disable Tune Start. (see *TuneStart™ setup (P.113)*)

TuneScan™

TuneScan™ is a feature that plays samples from the starts of multiple buffered songs from each of the Smart Favorite channels that predominantly play music selections. You have easy access to a large sampling of music content and can enjoy hearing a full song when stopping the scan on a song of interest.

1 Touch [ ] in the control screen.

The multi function menu appears.

2 Touch [TUNE SCAN] in the multi function menu.

The introductions of the songs will be played in recorded order.

3 Touch [TUNE SCAN] while your favorite song is being played.

Scan finishes and continues playing the song.

NOTE

- To cancel Tune Scan, Touch [TUNE SCAN] for 2 seconds.
  After cancel, the channel before starting Tune Scan will be played.

SiriusXM Setup

1 Touch [ ].
Quick menu appears.

2 Touch [SETUP].
SETUP Menu screen appears.

3 Touch [Source].

Source SETUP Menu screen appears.

4 Touch [SiriusXM SETUP] in the list.
SiriusXM SETUP screen appears.
See the following section for each setting.

- **Set up the parental code** *(P.110)*
- **Set up the parental control** *(P.111)*
- **Set up the skip channel select** *(P.112)*
- **Set up the Content alerts** *(P.112)*
- **Set up the content for Content alerts** *(P.112)*
- **Select the city for Content alerts** *(P.113)*
- **Set up the TuneStart™** *(P.113)*
- **Reset to the default settings** *(P.113)*

Parental code

You can set a SiriusXM parental code.

1 Touch [Change] of [Parental Code] in the SiriusXM SETUP screen.
Parental Pass Check screen appears.

NOTE
- The code number is set to "0000" as default.

2 Enter the current code number.
Parental Pass 1st entering screen appears.

3 Enter the new code number and touch [Enter].
Parental Pass 2nd entering screen appears.

4 Enter the same code number as you input in step 3 and touch [Enter].
The code number is confirmed and SiriusXM parental code is now set.

Parental control

Parental control is a feature that provides the user with the ability to prevent unauthorized access to mature content and user selected channels.

1 Touch [ON] or [OFF] of [Parental Lock Mature] in the SiriusXM SETUP screen.

2 Enter the same code number as you originally input in *Parental code (P.110)* and touch [Enter].

Turns the Mature on or off.

Default is "OFF".
If you want to separately set the parental lock for each channel, select OFF and proceed to step 3 onward.

3 Touch [SET] of [Parental Lock Channel Select] in the SiriusXM SETUP screen.

Parental Pass Check screen appears.

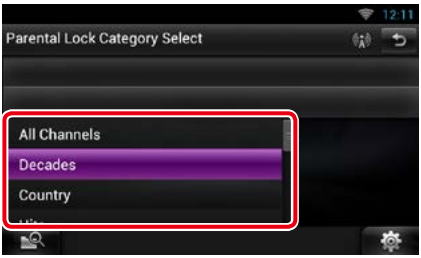
NOTE

- You need to complete *Parental code (P.110)* beforehand.
- To delete the parental lock channel setting, touch and hold [Unlock All] for 2 seconds, enter the Parental code number, then touch [Enter].

4 Enter the same code number as you originally input in *Parental code (P.110)* and touch [Enter].

Parental Lock Category Select screen appears.

5 Touch the desired category from the list.

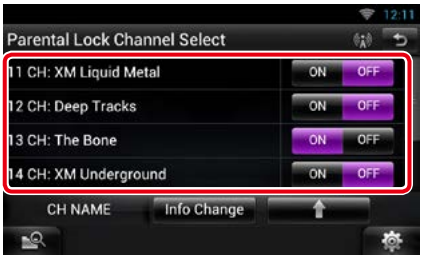


Displays all the channels in the selected category.

NOTE

- Touch [All Channels] to display all the channels.

6 Touch each channel list and set on or off.



NOTE

- Each time you touched [Info Change], switches the sequence of the channel list as follows; Channel name, Artist name, Song title, Category name, Content information.
- Touch [⇧] to return to Parental Lock Category Select screen.
- Touch [⮌] to return to SiriusXM SETUP screen.

Skip channel select

You can set the undesired channels to skip.

1 Touch [SET] of [Skip Channel Select].
Skip Category Select screen appears.

2 Touch the desired category from the list.
Displays all the channels in the selected category.

3 Touch each channel and set ON or OFF.

NOTE
- Operations in each list screen are same as *Parental control (P.111)*.

Content alerts setup

You can turn on or off the Content alerts function.

1 Touch [ON] or [OFF] of [Content alerts] in the SiriusXM SETUP screen.
Turns the Content alerts on or off.
Default is "ON".

Content alerts Content Set

You can set a content for Content alerts.

1 Touch [SET] of [Content alerts Content Set] in the SiriusXM SETUP screen.
Artist list screen appears.

NOTE
- To set all the content alerts off, touch and hold [Disable All] for 2 seconds.

2 Touch [Type] to select the screen of the content you want to set up.
Touching this allows you to switch among the Artist list, Song list, and Team list cyclically.

3 Touch each content list and set ON or OFF.

NOTE
- Touch "Delete" to delete the currently selected content from the Artist list and Song list.
- Available teams were pre-registered in the Team list. Team(s) cannot be registered or deleted manually.

City select for Traffic & Weather Jump

You can select a city for which traffic information or weather forecast is to be received with the Content alerts function.

1 Touch [◄] and [►] of [Traffic Weather Jump City Select] to select a city.

TuneStart™ setup

1 Touch [ON] or [OFF] of [Tune Start] in the SiriusXM SETUP screen.

Turns the Tune start on or off.

Default is "ON".

Reset

1 Touch [Reset] of [SiriusXM Reset] for 2 seconds in the SiriusXM SETUP screen.

All SiriusXM setting returns to default.

Streaming Service Application

Streaming Video Application

You can play videos uploaded to YouTube.

Preparation

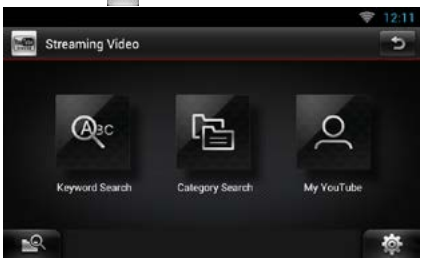
- You need to connect to Internet. See *Network Setup (P.32)*.

1 Press the <HOME> button.

2 Flick the screen left or right to select the Network contents panel.

3 Touch [ ].

4 Touch [Streaming Video].



[Keyword Search]

Searches for videos associated by the keyword.

[Category Serach]

Searches for videos by the category.

[My YouTube]

When you log in to YouTube, you can use the following:

Favorite Videos, Playlists, Recommeds, Upload Lists, Channel Feed

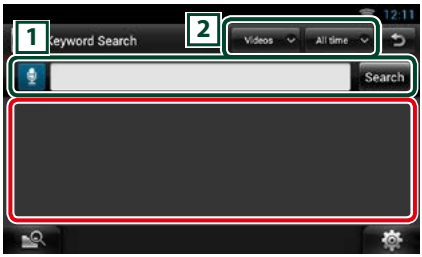
Note

- The video playback which uses the internet browser is not guaranteed.

Keyword Search

1 Touch [Keyword Search].

2 Perform desired operation as follows.



1

Enter a Keyword for search.

: Enter a keyword using the voice recognition function. When "Speak now" is displayed, pronounce the keyword.

[Search] : Begins search.

2

Specify the search range.

Video screen

1 In the playback screen, touch illustrated area.

Control screen appears.

2 Perform desired operation as follows.

[|◄◄]/ [►►|]

Searches the previous/next file.

[►II]

Plays or pauses.

Status bar

For confirmation of current playing position. You can drag the circle left or right to change the playing position.

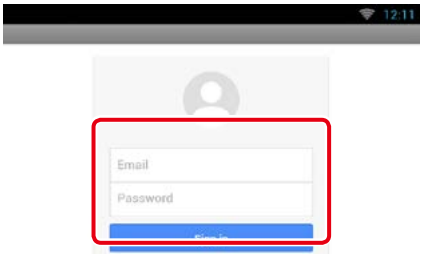
My YouTube

By logging into YouTube, you can use My Favorites and My-Videos.

1 Press the <MENU> button.

2 Touch [Sign in].

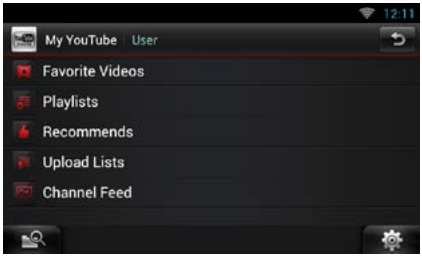
3 Enter the Email address and Password.



4 Touch [Sign in].

5 Touch [My YouTube].

6 Select a category.



Menu

1 Press the <MENU> button.

[Sign in]

Log into the YouTube service.
Now you can use My YouTube.

[Sign out]

Logs out from the current account.

AUPEO! Application

You can listen to music on the online radio AUPEO!.

Preparation

- You need to connect to Internet. See *Network Setup (P.32)*.

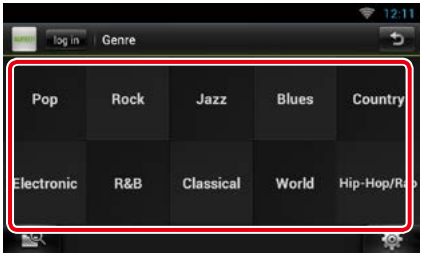
1 Press the <HOME> button.

2 Flick the screen left or right to select the Network contents panel.

3 Touch [ ].

4 Touch [Aupeo].

5 Select a genre.



Log in

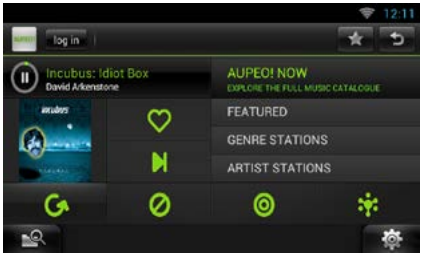
By registering an account, you can listen to your favorite songs.

1 Touch [log in].

2 Enter the User Name and Password.

3 Touch [log in].

Play screen



[ ]

Plays or pauses.

[ ] (Love)

I like this song.

Saves the artist name and the title by pressing it while your favorite song is being played. After saving, you can search for the song and play it from the list of the Summary Board using YouTube. See ***Summary Board Widget (P.58)***.

[ ] (Skip)

Play the next song.

[ ] (Ban)

I do not like this song.

[ ]

Select a sub genre.

[ ] (Mood)

Music matching your mood.

[ ]

Select a new genre.

[FEATURED]

Select a Featured Stations

[GENRE STATIONS]

Select a Genre Stations

[ARTIST STATIONS]

Create a station of your type by searching stations by the artist name.

[ ] (Favorites)

Edit the titles registered in Loves and Bans. You can use this button only when you have logged in to this service.

Editing Favorites

You can edit the titles registered in Loves and Bans.

Preparation

- You can only use this function when you have logged in this service.

1 Touch [ ].

log out
kwuser00
Favorites
Track
1 Big Maybelle : I've got a feelin'
2 Chage & Aska : Mebius
3 Chage & Aska : 指環が泣いた
4 Dreams Come True : ア・イ・...
5 Duke Ellington : Caravan

[ ]/ [ ]

Switches between Love and Ban.

[ ]

Deletes this title.

[ ]

Registers this artist as Ban.

Bluetooth Control

Using the Bluetooth function, various functions can be used: listening to the audio file, making/receiving a call.

About the Smartphone/cell-phone and Bluetooth audio player

This unit conforms to the following Bluetooth specifications:

Version

Bluetooth Ver. 3.0+EDR Certified

Profile

Smartphone/cell-phone:
HFP (V1.6) (Hands Free Profile)
SPP (Serial Port Profile)
SDP (Service Discovery Profile)
PBAP (Phonebook Access Profile)
GAP (Generic Access Profile)
Audio player:
A2DP (Advanced Audio Distribution Profile)
AVRCP (Audio/Video Remote Control Profile)

Sound codec

aptX, MP3, AAC, SBC

NOTE

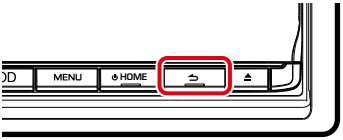
- For the smartphones/cell-phones verified for compatibility, access the following URL: http://www.kenwood.com/cs/ce/bt/.
- The units supporting the Bluetooth function have been certified for conformity with the Bluetooth Standard following the procedure prescribed by Bluetooth SIG.
  However, it may be impossible for such units to communicate with your smartphone/cell-phone depending on its type.

Registering and Connecting Bluetooth Unit

It is necessary to register the Bluetooth audio player or smartphone/cell-phone to this unit before using the Bluetooth function.

You can register up to 5 Bluetooth units.

1 Press and hold the < ⮌ > button.



Hands Free screen appears.

2 Touch [⚙].

Bluetooth SETUP screen appears.
See the following section for each setting.

- **Registering from this unit** *(P.119)*
- **Connecting the Bluetooth unit** *(P.119)*
- **Registering from the Bluetooth unit** *(P.120)*
- **Change the PIN code** *(P.120)*

Registering from this unit

Preparation

- You cannot register the Bluetooth unit when you are using the following sources:
  iPod, Bluetooth Audio, APPS, Pandora
  If you want to register the Bluetooth unit while using one of the above mentioned sources, send the connection request from the Bluetooth unit and register it.

1 Touch [Search].

Searched Device List screen appears.

NOTE

- A new device cannot be registered if there are 5 registered Bluetooth units. Delete unnecessary registration. See *Connecting the Bluetooth unit (P.119)*.
- This unit is compatible with the Apple Easy Pairing function. When an iPod touch or iPhone is connected to this unit using Dock Connector to USB Cable, an authentication dialog appears. Performing operation for authentication on this unit or iOS smartphone registers the smartphone as a Bluetooth device.

2 Select the Bluetooth unit to register from the list.

NOTE

- If the Bluetooth unit cannot be searched in step 1, you can search it again by touching [Search] in above screen.
- Touch [Cancel] to cancel searching for the Bluetooth unit.

3 Enter PIN code form the cell-phone.

Connecting the Bluetooth unit

1 Touch the name of device to connect.

Profile select screen appears.

NOTE

- If the icon is lighted, it means that the unit will use that device.

2 Set each profile as follows.

TEL (HFP)

Means that the Bluetooth unit is a smartphone/cell-phone.

Audio (A2DP)

Means that the Bluetooth unit is an audio player or smartphone/cell-phone with audio player.

NOTE

- If a device has been paired, the Bluetooth unit cannot be connected from the paired device.
- Touching [Remove] of [Device Remove Confirm] removes registration information. After you touch the key, a confirmation message appears. Follow the message and complete the operation.

Registering from the Bluetooth unit

1 Search the unit (“DNN**”) from your smartphone/cell-phone.**

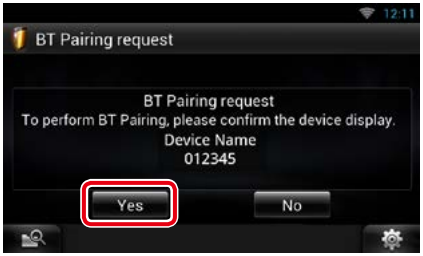
2 Input the PIN code in your smartphone/ cell-phone.

PIN code is set to “0000” as the default.

SSP (Secure Simple Pairing of Bluetooth 2.1 or later)

1 Search the unit (“DNN**”) from your smartphone/cell-phone.**

2 Confirm the request both on the smartphone/cell-phone and the unit.



Change the PIN code

1 Touch [PIN Code Set].

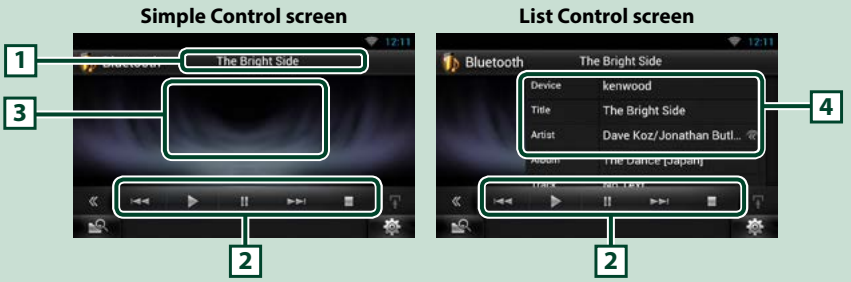
PIN Code Set screen appears.

2 Input the PIN code

3 Touch [Enter].

Playing Bluetooth Audio Device

Bluetooth basic operation



1 Information display

Displays the name of the content information. If the information is not available, Bluetooth unit name is displayed.

2 Multi function menu

The functions of each key are as follows.

- **[|◄◄] [►►|]**: Searches the previous/next content.*
- **[►]:** Plays.*
- **[❚❚]:** Pauses.*
- **[■]:** Stops playback.*

3 Control switching area

Touch to switch between the Simple Control and List Control screen.

4 Content information

Displays the information of the current content.

*** These items appear only when the audio player which supports AVRCP profile is connected.**

NOTE

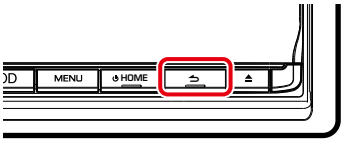
- If the operation keys do not appear, operate from the player.
- Depending on your smartphone/cell-phone or audio player, audio may be heard and controlled but text information may not appear.
- If the volume is too low, raise it on your smartphone/cell-phone or audio player.

Using Hands-Free Feature

You can make or answer a call with Hand-Free by connecting a smartphone/cell-phone with built-in Bluetooth connected to this unit.

Making a call

1 Press and hold the < ⮌ > button.



Hands Free screen appears.

NOTE

- If your cell-phone supports auto-download of phonebook but not downloaded automatically, follow the procedure above to download manually.
- See the instruction manual of your cell-phone for the operation.
- Up to 600 phone numbers can be registered for each registered cell-phone.
- Up to 32 digits can be registered for each phone number along with up to 50 characters representing a name. (50 is the number of alphabetical characters. Fewer characters can be input depending on the type of characters.)
- Depending on the type of your cell-phone, the following restrictions are placed;
  - –The phonebook data cannot be downloaded normally.
  - –Characters in the phonebook are garbled.
- To cancel downloading the phonebook data, operate the cell-phone.

2 Select a dialing method.

See the following table for each method.

Call by entering a phone number

①Touch [ ].
②Enter a phone number with number keys.
③Touch [ ].

Call using call records

①Touch [ ] (Incoming Calls), [ ] (Outgoing Calls), or [ ] (Missed Calls).
②Select the phone number from the list.
③Touch [ ].

Call using the phonebook

①Touch [ ].
②Select the name from the list.*1*2
③Select the number from the list.
④Touch [ ].

Call using the preset number

①Touch [Preset #] to start calling the corresponding phone number.

Voice Recognition

You can access the voice recognition function of the smartphone/cell-phone connected to this unit.

You can search a phone number in the smartphone/cell-phone phonebook by pronouncing a name. (The functionality depends on the cell-phone.)

①Touch [ ] to Voice Recognition screen appears.
②Pronounce a name.

*1 You can sort the list to begin with touched character.

- Characters with no corresponding name will not appear.
- During search, a non-accent character such as "u" is searched for instead of an accent character such as "ü".

*2 You can set the list to arrange in the order of last name or first name. For details, see *Hands-Free Setup (P.126)*.

NOTE

- If you edited the phonebook in your cell-phone, touch "Download" on top of the phonebook list in this unit to download it from your cell-phone. The phonebook in this unit will be updated with the latest downloaded data.
- While your car is moving, some functions are disabled for safety reasons. The keys associated with the disabled functions become ineffective if touched.
- The status icons such as battery and antenna displayed may differ from those displayed on the cell-phone.
- Setting the cell-phone in the private mode can disable the hands-free function.

Voice Recognition

You can access the voice recognition function of the smartphone/cell-phone connected to this unit.

You can search a phone number in the smartphone/cell-phone phonebook by pronouncing a name. (The functionality depends on the cell-phone.)

1 Press the <MENU> button.

NOTE

- This function is not displayed in the menu when you are operating an application. Press the <HOME> button to use this function.

2 Touch [Voice].

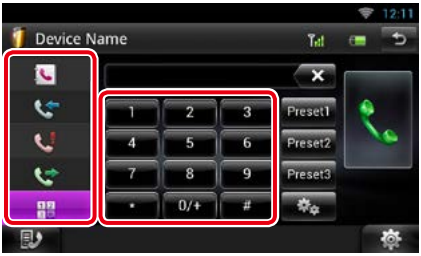
Voice Recognition screen appears.

3 Pronounce a name.

Phone number preset

You can register frequently used phone numbers to this unit.

1 Enter the number you want to register in Hands Free screen.



2 Touch [Preset 1], [Preset 2], or [Preset 3] for 2 seconds in the Hands Free screen.

Answering a call

1 Touch [ ] to answer a call or [ ] to reject a call.

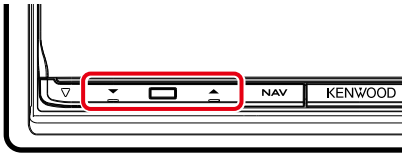
NOTE

- While monitoring the camera view, this screen does not appear even if a call comes in. To display this screen, press the <TEL> button or return the shift knob of car to the driver position.

Operation during a call

Adjust the receiver volume

Press the <▼> or <▲> button.



Switch the voice output

Touch [ ] / [ ] to switch the voice output between phone and speaker.

Sending DTMF tone signal

Touch [DTMF] to display the tone input screen.

You can send tones by touching desired keys on the screen.

Call waiting

You can answer a second call while talking with the first caller by placing the first call on hold and switching to the second call. You can switch back and forth between first and second caller as well.

To answer the second call

Touch [ ]. The first call is placed on hold and answers the second waiting call.

To switch back and forth between the first and second caller

Touch [ ] again.

Each time you touch [ ], the caller is switched.

To terminate the first call

Touch [ ].

The caller switches to the second caller.

Phone Number Search

You can search the address book in your cell phone for the number or the name, and make a call.

1 **Touch [ ].**

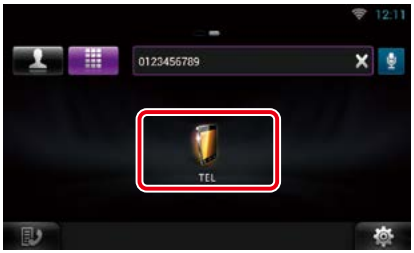
2 **Select whether you search by Phonebook name or Phone number .**

3 **Enter the Phonebook name or Phone number.**

Enter the keyword using the voice recognition function. When "Speak now" is displayed, pronounce the keyword.

* You can use a user account when you have logged in the Owner or User.

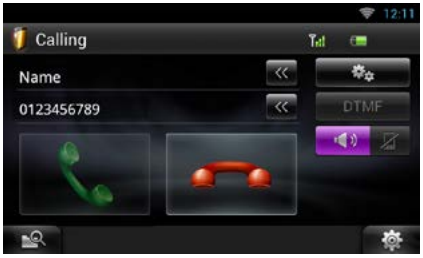
4 **Touch [TEL].**



When searched by Phonebook name

5 **Touch [ ].**

When searched by Phonebook number



The unit make a call.

Hands-Free Setup

You can perform various setup about hands-free function.

1 Touch [ ] on any screen.

2 Touch [SETUP].
SETUP Menu screen appears.

3 Touch [Bluetooth].

Bluetooth SETUP screen appears.

4 Touch [TEL SETUP].

Hands-free SETUP screen appears.

5 Set each item as follows.

Auto Response*1

Set the ringing time interval until the system automatically answers a call.

OFF (Default): Automatic response is not available.

0-99: Set ringing time interval (second).

Auto Pairing

When set to "ON", the Apple Auto Pairing function is turned on to automatically register the iPod touch or iPhone connected to this unit.

ON (Default): Uses Apple Auto Pairing function.

OFF: Not uses Apple Auto Pairing function.

Call Beep

Select whether or not to beep upon receiving a call.

ON (Default): Beeps.

OFF: Not beeps.

Phone Information Use

Set whether to download phonebook for outgoing, incoming and missed calls list.

ON (Default): Yes.

OFF: No.

Sort Order

Set how to arrange the cell-phone phonebook.

First: Arranges in the order of first name.

Last (Default): Arranges in the order of last name.

Echo Cancel Level

Adjust the level of echo cancellation.

Default is "1".

Microphone Level

Adjust the sensitivity of the telephone microphone. Default is "3".

Noise Reduction Level

Reduces the noises generated by surrounding environment without changing the microphone volume. Use this setting when the voice of caller is not clear. Default is "-10".

[Restore]

Resets the settings to the default settings.

***1 Either the time interval for automatic answer set on this unit or the time interval set on your smartphone/cell-phone, whichever is shorter takes effect.**

Voice Control (DNN991HD)

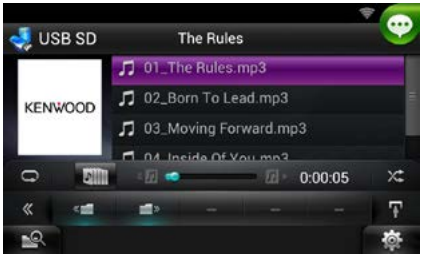
The unit is equipped with Advanced Voice Recognition function which allows you to operate it with your voice. The supported languages are US English, UK English, French, German, Dutch, Italian, and Spanish. For information on the voice commands, refer to *<Voice command table> (separate volume)*.

NOTE

- ASR on the Language Setting screen should be set to "Enabled". See *Language setup (P.132)*.

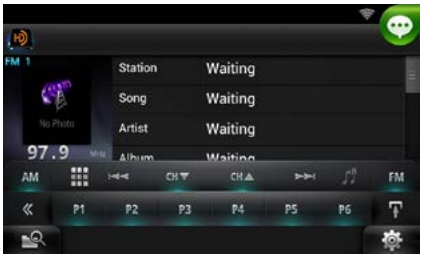
Voice Control

1 Press the Push-To-Talk switch to enter the Voice control mode.



The buttons enclosed in a green square support the voice control.

2 Speak the command. (Ex: Speak "HD RADIO".)



The screen has changed to the HD Radio Control screen.

You will hear a beep again.

3 Repeat the same procedure as step 2.

For information on the voice commands, refer to *<Voice command table> (separate volume)*.

4 Press the Push-To-Talk switch to end the voice control mode.

Displaying Voice Commands

To display the list of operable voice commands.

1 Press and hold the Push-To-Talk switch.

The list of operable voice commands appears. Pronounce a command.

NOTE

- To cancel the commands list display, press Push-To-Talk switch or touch the screen.

Camera Control

When a CMOS-3xx (optional accessory) is connected, the camera can be controlled from this unit.

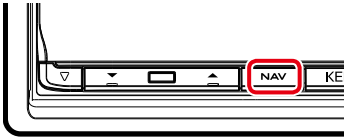
Preparation

- [NAV Key Longer than 1 Second] must be set to "CAM". See *User interface (P.131)*.

Camera Control

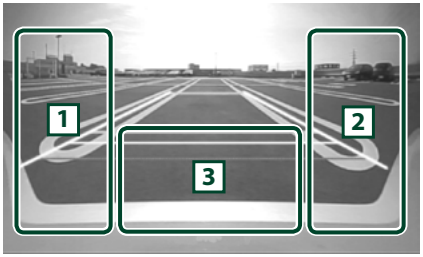
You can adjust the camera angle of the camera system and display of the guideline.

1 Press the <NAV> button for 1 second.



Camera view screen appears.

2 Adjust each item as follows.



1 Guideline

Pressing each time turns on or off the guideline display alternately.

2 Angle

Pressing each time changes camera angles in the following order:

Super wide view/ Wide view/ Overhead view/ Wide view + Top view/ Corner view

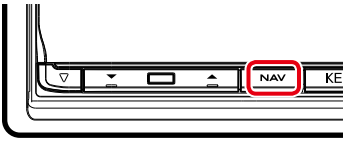
3

Clearing the Camera View display.

Switching the View Camera

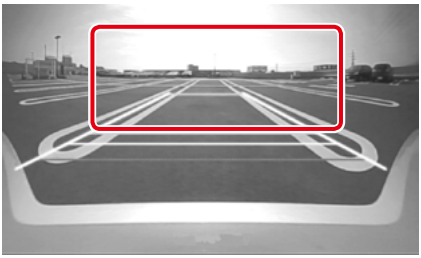
Switching between the front view camera and the rear view camera.

1 Press the <NAV> button for 1 second.



Camera view screen appears.

2 Touch illustrated area during Camera view screen.



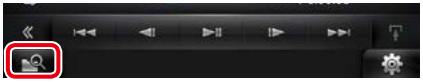
Switches between the front view camera and rear view camera each time you touch the illustrated area.

Setting Up

Monitor Screen Setup

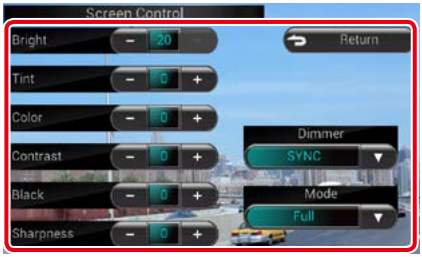
You can adjust image quality of playback screen, background screen, etc.

1 Touch and hold the lower left area of any screen.



Screen Control screen appears.

2 Adjust each item as follows.



Background screen

Bright / Tint / Color / Contrast / Black / Sharpness

Adjusts each item.

Dimmer

Select dimmer mode.

ON: The display and buttons dim.

OFF: The display and buttons do not dim.

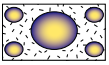
SYNC (Default): Turns the dimmer function on or off when the vehicle light control switch is turned on or off.

NAV-SYNC: Turns the dimmer function on or off according to the Navigation Day/Night display setting.

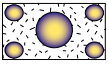
Mode (Playback screen only)

Select screen mode.

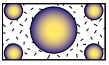
Full: Full picture mode



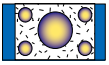
Just: Justify picture mode



Zoom: Zoom picture mode



Normal: Normal picture mode



NOTE

- Adjusting items are different depending on the current source.
- You can perform this function only when you have applied the parking brake.
- The image quality can be set for each source.

System Setup

NOTE

- Each operation in this section can be started from the multi function menu.

1 Touch [ ] on any screen.
Quick Menu screen appears.

2 Touch [SETUP].

3 Touch [System].

System screen appears.
See the following section for each setting.

- **Set up the user interface** *(P.131)*
- **Set up security** *(P.132)*
- **Set up external switch** *(P.133)*
- **Set up memory** *(P.133)*

User interface

You can setup user interface parameters.

1 Touch [User Interface] in the list.
User Interface screen appears.

2 Set each item as follows.

Beep

Turns the key touch tone on or off.
Default is "ON".

Language

Select the language used for the control screen and setting items. See *Language setup (P.132)*.

Text Scroll

Allows scrolling of text display on the source control screen. Select from "Auto"/"Once"/"OFF".

Auto (Default): Scrolls the text automatically.

Once: Allows you to scroll the text only once automatically when updated.

OFF: Does not scroll the text automatically.

NAV Key Longer than 1 Second

You can set the operation performed when the NAV key is pressed for 1 second. Select from "V.OFF"/"CAM".

V.OFF: Turn the display off.

CAM (Default): Switches to the front or rear view camera video display.*

Secondary

Set whether to display the navigation information in the audio screen or vice versa. Default is "ON".

DEMO

Set the demonstration mode. Default is "ON".

*** When you set [Front Camera] to OFF, the display will change to the rear view camera and when you set it to "CMOS-3xx"/ "Other", the display will change to the front view camera. See *Camera Setup (P.137)***

Language setup

1 Touch [SET] of [Language] in the User Interface screen.

Language Setting screen appears.

2 Set each item as follows.

GUI Language Select

Select the language used for the GUI and input methods.

ASR (DNN991HD)

Select the language used for voice control function.

Navigation Language Select

Select the language used for navigation.

STT

Select the language used for Speech to Text (STT).

TTS

Select the language used for Text to Speech (TTS).

3 Touch [Enter].

NOTE

- To cancel the language setup, touch [Cancel].

Security setup

A red indicator will blink on the unit after the ACC is set to OFF, warning potential thieves.

If turned to "ON" (default), the security indicator on the front panel flashes when the vehicle ignition is off.

1 Touch [Security] in the System Menu screen.

Security screen appears.

2 Touch [ON] or [OFF] of [SI].

EXT SW setup

Set up the external switch power mode.

1 Touch [EXT SW] in the System Menu screen.

EXT SW screen appears.

2 Set each item as follows.

Output Pattern

Set the power signal output mode among "Pulse"/"Level". Default is "Pulse".

You can set to turn output on/off each time the button on the EXT SW screen is touched. See *External Device Control (P.136)*.

Pulse Set

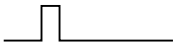
Set the pulse signal output time.

Outputs 500ms when "1" is set.

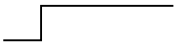
Increases by 200ms with each step. Up to 100 steps can be set.

NOTE

- You can enter characters only after you have applied the parking brake.
- "Pulse": Generates a single power signal pulse.



- "Level": Continues output of high power signal.



Setup memory

Audio Control, AV-IN SETUP, Camera, and Audio SETUP settings can be memorized. The memorized settings can be recalled at any time. For example, even when the settings are cleared due to replacement of the battery, the settings can be restored.

1 Touch [SETUP Memory] in the System Menu screen.

SETUP Memory screen appears.

2 Follow the instruction on the screen.

[Lock] / [Unlock]*

Locks or unlocks the AV-IN SETUP, and Audio SETUP settings.

Yes

Memorizes or recalls the settings.

No

Cancels the function or memorization.

The SETUP Menu screen appears again.

*** When [Lock] is selected, you cannot change the AV-IN SETUP, and Audio SETUP settings. Also, the locked key mark is displayed under each setting icon in the setup menu.**

Continued

3 Follow the instruction on the screen.

Recall

Recalls the memorized settings.

Memory

Memorizes the current settings.

Clear

Clears the currently memorized settings.

Cancel

Cancels memorization/recalling of settings.

Display Setup

1 Touch [ ] on any screen.

2 Touch [SETUP].

SETUP Menu screen appears.

3 Touch [Display].

Display screen appears.

See the following section for each setting.

- **Control monitor angle** *(P.134)*
- **Adjust panel color** *(P.135)*

Monitor angle control

You can adjust the angle of the monitor.

1 Touch [Angle] in the Display Menu screen.

Angle setup screen appears.

2 Select a number below an angle that will best suit your monitor viewing.

Default is "0".

NOTE

- You can store the current monitor angle as the angle during power off. Touch [Memory] when the desired angle is selected.

Panel color coordinate

You can set the button illumination color.
The selectable items differ depending on the unit.

1 Touch [Color] in the Display Menu screen.

Color screen appears.

2 Touch [SET] of [Panel Color Coordinate].

Panel Color Coordinate screen appears.

NOTE

- You can touch [SET] or [Initialize] when [Panel Color Scan] is set to off.
- Touch [Initialize] to reset the settings to the default settings.

3 Touch the desired color.

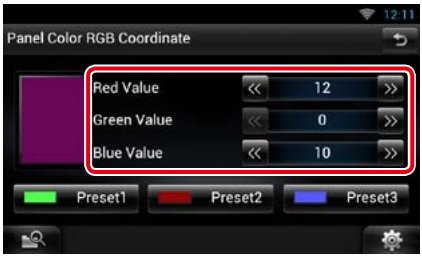
Registering original color

You can register your original color.

1 Touch [Adjust] in the Panel Color Coordinate screen.

Panel Color RGB Coordinate screen appears.

2 Use [◄] and [►] to adjust each color value.



3 Touch the desired preset key for 2 seconds.

Panel color scan

You can set the panel color to continuously scan through the color spectrum.

1 Touch [ON] of [Panel Color Scan] in the Color screen.

Panel Color Scan is set to on.

Navigation Setup

You can set navigation parameters.

1 Touch [ ] on any screen.

2 Touch [SETUP].
SETUP Menu screen appears.

3 Touch [Navigation].

Navigation SETUP screen appears.

4 Set each item as follows.

NAV Interrupt Speaker

Select speaker(s) used for voice guidance of the navigation system.

Front L: Uses the front left side speaker for voice guidance.

Front R: Uses the front right side speaker for voice guidance.

Front All (Default): Uses both front speakers for voice guidance.

NAV Voice Volume

Adjust the volume for voice guidance of the navigation system. Default is "20".

NAV Mute

Mutes the volume of rear speakers during voice guidance of the navigation system. Default is "ON".

External Device Control

Control the external device power supply.

1 Touch [ ] on any screen.

2 Touch [EXT SW].

You can turn on or off the external device power supply.

NOTE

- You must connect a commercially available relay unit in order to use this function. Connect the external device to be controlled to that relay unit.
- See *EXT SW setup (P.133)* for information on setting the power on or off specification.

Camera Setup

You can set camera parameters.

1 Touch [ ] on any screen.

2 Touch [SETUP].
SETUP Menu screen appears.

3 Touch [Camera].

Camera SETUP screen appears.

4 Set each item as follows.

Rear Camera*1

Select the type of rear camera to use.

CMOS-310: When the CMOS-3xx series with ID 1 set is connected.

Other (Default): When the other camera is connected.

R-CAM Interruption

Set a method for switching the display. Setting values are ON and OFF.

ON: Switches to the rear view camera video display when shifting to reverse or pressing the <NAV>*4 button for 1 second.

OFF (Default): Switches to the rear view camera video display when pressing the <NAV>*4 button for 1 second.

R-CAM Settings*2

Adjust the CMOS-3xx series with ID 1 set. For details, see the instruction manual of your camera.

Front Camera*1

Select the type of front camera to use.

CMOS-310: When the CMOS-3xx series with ID 2 set is connected.

Other: When the other camera is connected.

OFF (Default): When the front camera is not used.

F-CAM Settings*3

Adjust the CMOS-3xx series with ID 2 set. For details, see the instruction manual of your camera.

***1 These settings become settable only when the parking brake is on.**

***2 This setting becomes settable only when the parking brake is on and the CMOS-3xx series is selected.**

***3 This setting becomes settable only when the parking brake is on and "Front Camera" is set to [ON].**

***4 [NAV Key Longer than 1 Second] must be set to "CAM". See *User interface (P.131)*.**

Software Information

Check the software version of this unit.

1 Touch [ ] on any screen.

2 Touch [SETUP].

SETUP Menu screen appears.

3 Touch [Software].

Software Information screen appears.

4 Confirm the software version. Touch [Update] as necessary.

NOTE

- For how to update the software, see the relevant update procedure manual which comes with the software.

Notify the update

When the program is updated you will be notified by the icon on the status bar.

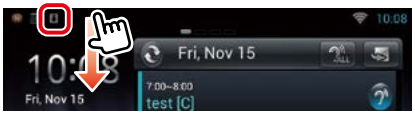
Preparation

- You need to connect to Internet.

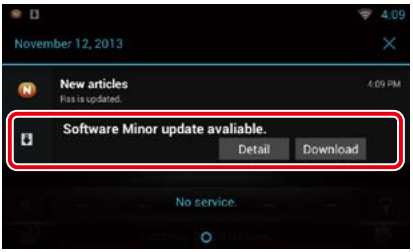
Minor update

If it is the minor update you can update the program via the Internet.

1 Drag the status bar downward.

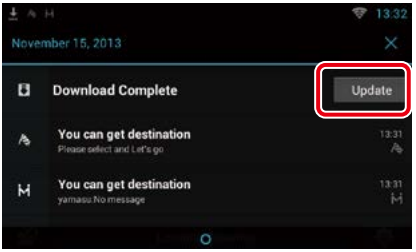


2 Touch [Download] to start download.



Touch [Detail] to display details.

3 Touch [Update].



4 Touch [Update] to update starts.

When the update is complete "Update completed" appears.

AV Input Setup

You can set AV input parameters.

1 Touch [ ] on any screen.

2 Touch [SETUP].
SETUP Menu screen appears.

3 Touch [Source].

4 Touch [AV-IN SETUP] in the list.
AV-IN SETUP screen appears.

5 Set each item as follows.

AV-IN1 Name / AV-IN2 Name

Set a name to be displayed when you select a system that is connected via the AV INPUT port. Default is "VIDEO".

AV Output Interface Setup

You can select an AV source to be output at the AV OUTPUT port. Default is "VIDEO1".

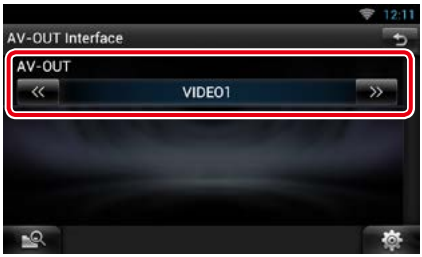
1 Touch [ ] on any screen.

2 Touch [SETUP].
SETUP Menu screen appears.

3 Touch [AV-OUT].

AV-OUT Interface screen appears.

4 Touch [◄] or [►] to set [AV-OUT] to VIDEO, DISC, iPod, or OFF.



NOTE

- You can select "iPod" only when iPod is connected to this unit with KCA-iP202. For the connection setting, refer to *iPod/iPhone connection setup (P.84)*.

Controlling Audio

NOTE

- Each operation in this section can be started from the multi function menu.

You can adjust the various settings such as audio balance or subwoofer level.

1 Touch [ ] on any screen.

2 Touch [Audio].

Audio screen appears.

See the following section for each setting.

- **Setting audio** *(P.140)*
- **Controlling audio** *(P.143)*
- **Controlling equalizer** *(P.144)*
- **Controlling sound effect** *(P.146)*
- **Performing zone control** *(P.145)*
- **Set listening position** *(P.148)*

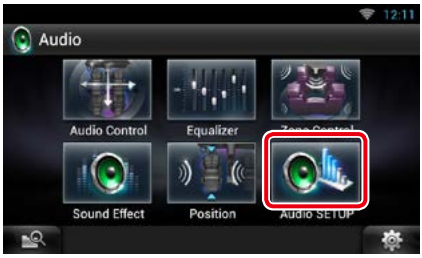
Setting Audio

1 Touch [ ] on any screen.

2 Touch [Audio].

Audio screen appears.

3 Touch [Audio SETUP].



Audio SETUP screen appears.

See the following section for each setting.

- **Set up speakers** *(P.141)*
- **Set up your car type** *(P.142)*
- **Select DSP** *(P.143)*

Speaker setup

You can select a speaker type and its size to get the best sound effects.

When the speaker type and size are set, the speaker crossover network is set automatically.

1 Touch [Speaker Select] in the Audio SETUP screen.

Speaker Select screen appears.

2 Touch the speaker you wish to adjust and set each item as follows.

Tweeter

You can set the tweeter when you are selecting front speakers.

None, Small, Middle, Large

X'over

Displays the speaker crossover setup screen.

You can adjust the crossover setup that was set automatically when you selected the speaker type.

For details, see *Crossover network setup (P.142)*

3 Select a speaker size using [◄] and [►]. The speaker size is different depending on the speaker type and the unit.

Front

OEM, 3-1/2 inch, 4 inch, 4-3/4 inch, 5 inch, 6-1/2 inch, 6-3/4 inch, 7 inch, 4x6, 5x7, 6x8, 6x9, 7x10

Rear

None, OEM, 3-1/2 inch, 4 inch, 4-3/4 inch, 5 inch, 6-1/2 inch, 6-3/4 inch, 7 inch, 4x6, 5x7, 6x8, 6x9, 7x10

Subwoofer

None, 6 1/2 inch, 8 inch, 10 inch, 12 inch, 15 inch over

NOTE

- Select "None" if you have no speakers.

Crossover network setup

You can set a crossover frequency of speakers.

1 Touch the speaker to set the crossover in the Speaker Select screen.

2 Touch [X'over].

X'over screen appears.

3 Set each item as follows.

TW (Tweeter) Gain *1

Adjust the tweeter level. (When front is selected on Speaker Select screen)

Gain

Adjust the front speaker, rear speaker, or subwoofer level.

Phase *2

Set the phase of subwoofer output.

The phase is reversed 180 degrees when set to "Reverse". (When subwoofer is selected on Speaker Select screen)

HPF FREQ

High Pass Filter adjustment. (When front or rear speaker is selected on Speaker Select screen)

LPF FREQ

Low Pass Filter adjustment. (When subwoofer is selected on Speaker Select screen)

Slope *3

Set a crossover slope.

***1 Only when "Tweeter" is set to "Small", "Middle", "Large" in <Speaker Setup>.**

***2 Only when "Subwoofer" is set to a mode other than "None"/"OFF" in <Speaker Setup>.**

***3 Only when "LPF FREQ"/"HPF FREQ" is set to a mode other than "Through" in <X'over>.**

Car type setup

You can setup the car type and speaker network, etc.

1 Touch [Car Type] in the Audio SETUP screen.

Car Type screen appears.

2 Select your car type from the list.

NOTE

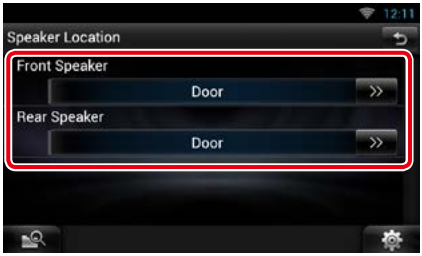
- If your car type is selected, the Delay Time Alignment is set automatically (for timing adjustment of sound output for each channel) to have the highest surround effects.

Speaker location setup

1 In the Car Type screen, touch [Location].

Speaker Location screen appears.

2 Select the speaker locations using [►].



Front Speaker

Select the location from "Door"/"On Dash"/"Under Dash".

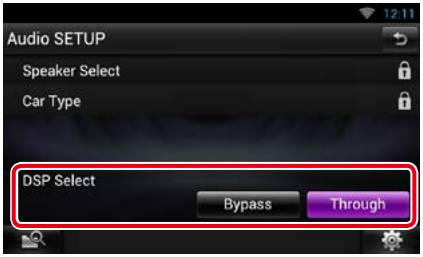
Rear Speaker

Select the location from "Door"/"Rear Deck", "2nd Row"/"3rd Row" (Minivan, Minivan (Long)).

DSP select

You can select whether using DSP (Digital Signal Processor) System.

1 Touch [Bypass] or [Through] of [DSP Select] in the Audio SETUP screen.



Bypass

There is no effect by DSP.

Through

There is an effect by DSP.

NOTE

- When the mode is set to [Bypass], DSP System cannot be adjusted.

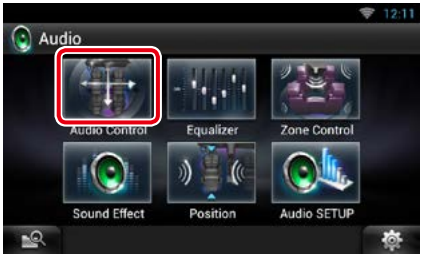
Controlling General Audio

1 Touch [ ] on any screen.

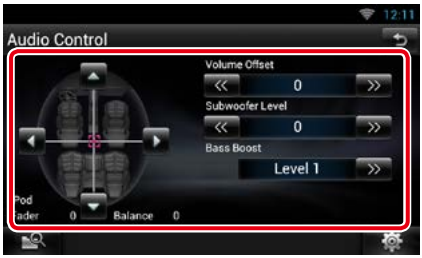
2 Touch [Audio].

Audio screen appears.

3 Touch [Audio Control].



4 Set each item as follows.



Fader # / Balance #

Adjust the volume balance around the touched area.

[◄] and [►] adjust the right and left volume balance.

[▲] and [▼] adjust the front and rear volume balance.

Volume Offset*

Finely adjust the volume of the current source to minimize the difference in volume between different sources.

Subwoofer Level

Adjust the subwoofer volume. This setting is not available when subwoofer is set to "None". See *Speaker setup (P.141)*.

Bass Boost

Set the amount of bass boost among "OFF"/ "Level1"/ "Level2"/ "Level3".

*** If you have increased the volume first, then reduced the volume using the "Volume Offset", the sound generated if you suddenly switch to another source may be extremely loud.**

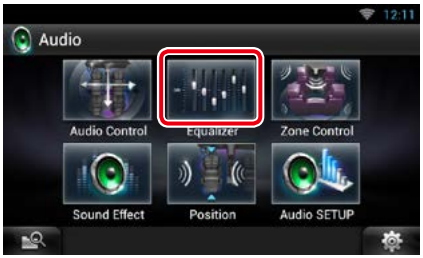
Equalizer Control

You can adjust equalizer by selecting the optimized setting for each category.

1 Touch [ ] on any screen.

2 Touch [Audio].
Audio screen appears.

3 Touch [Equalizer].



Equalizer screen appears.

Controlling EQ curves

1 Select EQ curve from [Natural], [Rock], [Pops], [Easy], [Top40], [Jazz], [Powerful], [iPod], and [User].

NOTE
- [iPod] is available only during iPod source.

Controlling equalizer manually

The Graphic Equalizer cannot be set when you select [iPod] in the Equalizer screen.

1 Touch [EQ] in the Equalizer screen.

2 Touch the screen and set the Graphic Equalizer as desired.

Gain level (light green boxed area)

Adjust the gain level by touching the each frequency bar.
Touching [◄], [►], [▲] and [▼] can also adjust the level. Use [◄] and [►] to select a frequency, and [▲] and [▼] to set the level.

EQ INIT

Returns to the previous level which the gain level is adjusted.

Flat

Tone curve becomes flat.

Bass EXT (Bass Extend Settings)

When turned on, the frequency lower than 62.5 Hz is set to the same gain level as 62.5 Hz.

Loudness

Set the amounts of boost of low and high tones. "OFF", "Low", "High"

SW Level

Adjust the subwoofer volume. This setting is not available when subwoofer is set to "None". See *Speaker setup (P.141)*.

Zone Control

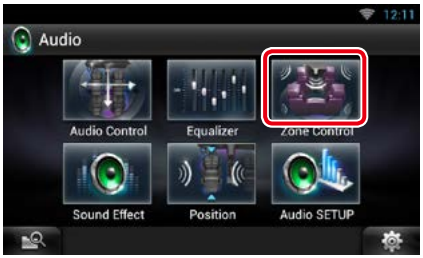
You can select different sources for both front and rear positions in the vehicle.

1 Touch [ ] on any screen.

2 Touch [Audio].

Audio screen appears.

3 Touch [Zone Control].



Zone Control screen appears.

4 Touch [Dual Zone].

5 Set each source as follows.

[►] (Front Source, Rear Source)

Select the audio source for each.

[▼], [▲] (Rear VOL.)

Adjust the rear channel volume.

[Single Zone]

Touch to turn off the dual zone function.

NOTE

- When the rear speaker sound is switched, the audio source that is output at the AV OUTPUT terminal is also switched to the same source.
- When the dual zone function is set to on, the following functions are not available.
  - Output from the subwoofer
  - Subwoofer Level/Bass Boost *(P.143)*
  - Equalizer Control/Sound Effect/Listening Position *(P.144, 146, 148)*
  - DSP Bypass Control/Speaker Setup/Car Type Setup *(P.143, 141, 142)*

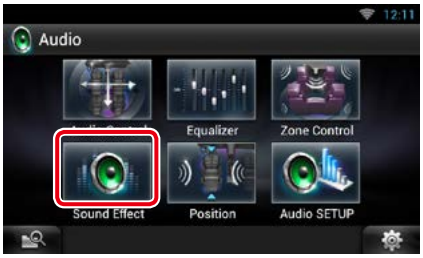
Sound Effect

You can set sound effects.

1 Touch [ ] on any screen.

2 Touch [Audio].
Audio screen appears.

3 Touch [Sound Effect].



Sound Effect screen appears.

See the following section for each setting.

- **Set space enhancer** *(P.146)*
- **Set Drive Equalizer +** *(P.147)*
- **Set up elevation** *(P.147)*
- **Set up realizer or supreme** *(P.147)*

Space Enhancer

1 Touch [Space Enhancer] in the Sound Effect screen.

Space Enhancer screen appears.

2 Touch [Small], [Large], or [OFF].
Each setting value indicates the soundscape level.

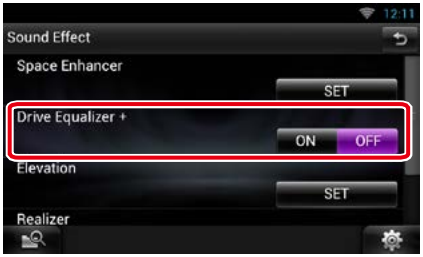
NOTE

- This setting is not available during HD Radio tuner source.

Drive Equalizer +

The sound quality is automatically optimized to meet the current car speed by GPS.

1 Touch [ON] or [OFF] of [Drive EQ+].



Elevation

You can raise the sound position heard from the speakers virtually.

1 Touch [Elevation] in the Sound Effect screen.

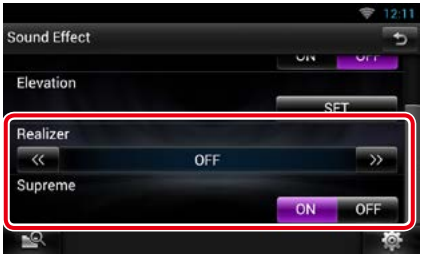
Elevation screen appears.

2 Select Elevation level from [High], [Low], and [OFF].

Realizer and Supreme

You can restore the sound lost due to audio compression to a realistic sound.

1 Touch the screen in the Sound Effect screen.



Realizer

Realizer is sound enhancement and boosting low frequencies (bass boost).

Select the level from "OFF"/ "Level1"/ "Level2"/ "Level3".

Supreme

Turns ON/OFF the Supreme function.

Technology to extrapolate and supplement with proprietary algorithm, the high-frequency range that is cut off when encoding.

This function works on DVD MEDIA, USB, SD and iPod sources.

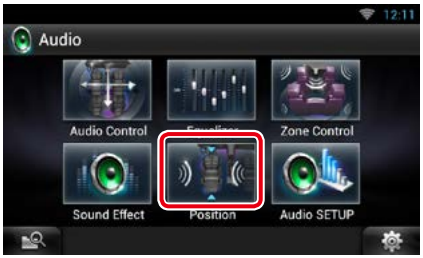
Listening Position

You can adjust the sound effects according to your listening position.

1 Touch [ ] on any screen.

2 Touch [Audio].
Audio screen appears.

3 Touch [Position].



Position screen appears.

4 Select listening position from [Front R] (Right front), [Front L] (Left front), [Front All] (All front), and [All] using [◄] and [►].

Position DTA Control

You can fine-adjust your listening position.

1 In Position screen, touch [Adjust].

2 Select the speaker you wish to adjust by touching speaker icon.

3 Set DTA as follows.

[◄], [►]
Adjust the settings of the DTA position.

Gain
Touch to adjust the gain of each speaker.

Initialize
Initializes the setting values.

NOTE

- Make fine adjustment of the delay time of the speaker output specified here to have a more suitable environment for your vehicle.
- If you specify the distance from the center of the currently set listening position to every speaker, the delay time will be automatically computed and set.

①Determine the center of the currently set listening position as the reference point.

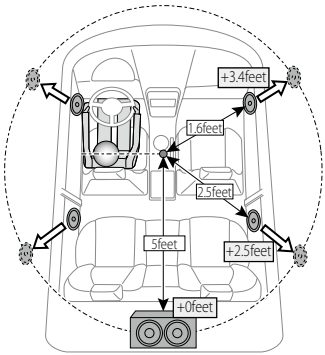
②Measure the distances from the reference point to the speakers.

③Calculate the differences between the distance of the furthest speaker and other speakers.

④Input the differences calculated in step 3 for individual speakers.

⑤Adjust gain for individual speakers. A sound image will be shifted to the speaker with increased gain.

Example: When [Front All] is selected as the listening position



Remote Control

This unit can be operated using the remote control.

⚠CAUTION

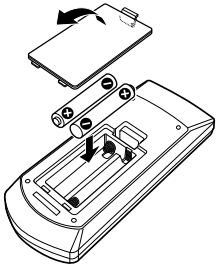
- **Put the remote control in a place where it will not move during braking or other operations. A dangerous situation could result, if the remote control falls down and gets wedged under the pedals while driving.**
- **Do not leave the battery near fire or under direct sunlight. A fire, explosion or excessive heat generation may result.**
- **Do not recharge, short, break up or heat the battery or place it in an open fire. Such actions may cause the battery to leak fluid. If spilled fluid comes in contact with your eyes or on clothing, immediately rinse with water and consult a physician.**
- **Place the battery out of reach of children. In the unlikely event that a child swallows the battery, immediately consult a physician.**

Battery Installation

If the remote control operates only over shorter distances or does not operate at all, it is possible that the batteries are depleted.

In such instances, replace the both batteries with new ones.

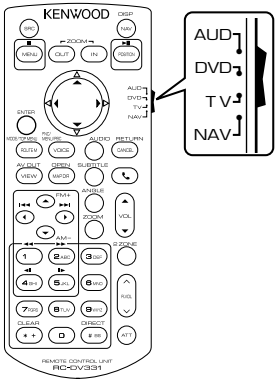
1 Insert two "AAA"/"R03"-size batteries with the ⊕ and ⊖ poles aligned properly, following the illustration inside the case.



Functions of the Remote Control Buttons

Switching the operation mode

The functions operated from the remote control differ depending on the position of the mode switch.



AUD mode

Switch to this mode when controlling a selected source or tuner source, etc.

DVD mode

Switch to this mode when playing a disc media including DVD, VCD, and CD.

NAV mode

Switch to this mode when controlling navigation function.

NOTE

- When controlling a player that is not integrated in the unit, select "AUD" mode.

Direct search mode

Using the remote control, you can jump directly to the desired file, track chapter, etc. with entering the number corresponding to the content.

NOTE

- This operation cannot be performed for USB device and iPod.

1 Press the <#BS> button several times until the desired content appears.

The available contents are different depending on the source.

DVD

Title number/Chapter number/Play time/Item number*

* You may not be able to use this function with some discs or scenes.

VCD 1.X and 2.X (PBC OFF)

Track number

VCD 2.X (PBC ON)

Scene number/number

Music CD

Track number/Play time

Audio files

Folder number/File number

Radio

Frequency value

HD Radio tuner

Frequency value/Channel number

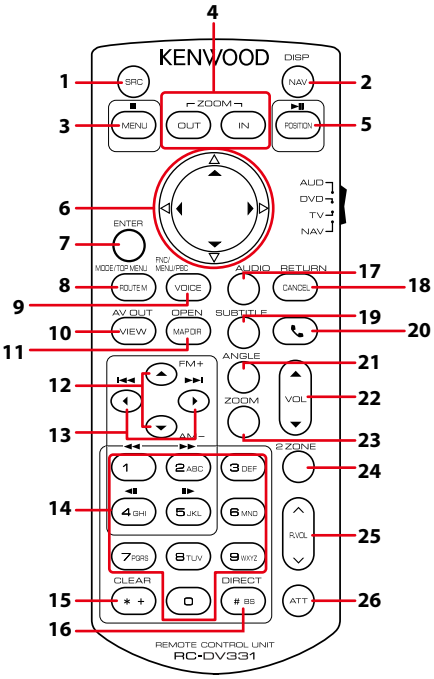
SiriusXM

Channel number

2 Enter the number of the content you want to play using the numeric keypad.

3 For DVD or VCD, press the <POSITION> button.
For music CD or audio files, press the <POSITION> button.
For radio, press the <◄> or <►> button.

The content you entered is played.



	Key Name	Location of the mode switch	Function
1	SRC	AUD, DVD	Switches to the source to be played. In hands-free mode, hangs up the phone.
2	NAV	–	Switches between the navigation and the source screens.
3	MENU	DVD	Stops playing and memorizes the last point where the disc stopped. The last point is deleted by pressing twice.
		NAV	Displays Main menu.
4	OUT, IN	NAV	Zooms in or out the navigation map.
5	POSITION	AUD, DVD	Pauses the track or file, and resumes playing by pressing twice. During Radio, HD Radio, and SiriusXM source in AUD mode, switches the seek mode.
		NAV	Displays the current position.
6	Cursor Key	DVD	Moves the cursor in the DVD menu.
		NAV	Moves the cursor or scrolls the map.
7	ENTER	DVD	Performs the selected function.
		NAV	• Registers the selected position. • Performs the selected function.

	Key Name	Location of the mode switch	Function
8	ROUTE M	AUD	Screen mode changes each time you press this key during video playback.
		DVD	Returns to the DVD top menu.
		NAV	Displays Route Option menu.
9	VOICE	AUD	Switches navigation display on/off.
		DVD	Displays the DVD menu. Turns the playback control on or off while playing VCD.
		NAV	Speaks the voice guidance.
10	VIEW	AUD, DVD	Switches the AV source to be output.
		NAV	Switches between 2D and 3D map displays.
11	MAP DIR	AUD, DVD	Switches the display angle each time it is pressed.
		NAV	Switches between the heading up navigation and north up navigation map displays.
12	▲/▼	AUD, DVD	Selects the folder to be played. During Radio, HD Radio, and SiriusXM source in AUD mode, switches the bands to be received.
13	◄/►	AUD, DVD	Selects the track or file to be played. During Radio, HD Radio, and SiriusXM source in AUD mode, switches to broadcast stations received by the unit.
14	Numeric Keypad	AUD	Specifies the number to search in direct search. For details on the direct search mode, see ***Direct search mode (P.151)***.
		DVD	• Press [1] [2] to fast forward/backward. Switches the fast forward/backward speed each time you press this key.* • Press [4] [5] to slow forward/backward. Switches the slow playback speed each time you press this key.* *DVD only
15	* +	DVD	Clears the number.
16	# BS	AUD, DVD	Switches to the direct search mode. For details on the direct search mode, see ***Direct search mode (P.151)***.
17	AUDIO	DVD	Switches the voice language each time you press this key.
18	CANCEL	DVD	Displays previous screen.
		NAV	Cancels the operations.
19	SUBTITLE	DVD	Switches the subtitle language.
20	✆	–	When a call comes in, answers the call.
21	ANGLE	DVD	Switches the picture angle each time you press this key.
22	Vol ▲▼	–	Adjusts the volume.
23	ZOOM	DVD	Switches the zoom ratio (1, 2, 3, Off) each time you press this key.
24	2 ZONE	AUD, DVD	Switches the Dual Zone function on and off.
25	R.VOL ∿∿	–	Adjusts volume at rear when the Dual Zone function is on.
26	ATT	–	Lowers the volume by pressing the key once. Restores the previous volume by pressing the key twice.

Troubleshooting

Problems and Solutions

If any trouble occurs, first check the following table for possible problems.

- **Some functions of this unit may be disabled by some settings made on this unit.**
- **What might seem to be a malfunction in your unit may just be the result of slight misoperation or miswiring.**

About settings

Problem	Reason	Solution
• Cannot set up the subwoofer. • Cannot set up subwoofer phase. • No output from the subwoofer. • Cannot set up the low pass filter. • Cannot set up the high pass filter.	Subwoofer is not set to on.	Set the subwoofer to on. See ***Speaker setup (P.141)***.
	The dual zone function is enabled.	Set the dual zone function to off. See ***Zone Control (P.145)***.
• Cannot select the output destination of the subsource in the dual zone. • Cannot adjust the volume of the rear speakers.	The dual zone function is disabled.	Set the dual zone function to on. See ***Zone Control (P.145)***.
• Cannot set up the equalizer. • Cannot set up the crossover network.	The dual zone function is enabled.	Set the dual zone function to off. See ***Zone Control (P.145)***.
	"DSP Select" is set to "Bypass".	Set "DSP Select" to "Through". See ***DSP select (P.143)***.

About audio operations

Problem	Reason	Solution
Radio reception is poor.	The car antenna is not extended.	Pull out the antenna all the way.
	The antenna control wire is not connected.	Connect the wire correctly. See "Connection" in the Quick Start Guide.
Cannot play audio files stored in a disc.	"CD Read" is set to "2".	Set "CD Read" to "1". See ***Disc setup (P.67)***.
Cannot select a folder.	The random play function is enabled.	Turn off the random function.
Cannot perform repeat play during VCD playback.	The PBC function is enabled.	Turn off the PBC function.
The specified disc does not play, but another one plays instead.	The disc is quite dirty.	Clean the disc. See ***Precautions on handling discs (P.4)***.
	The disc is severely scratched.	Try another disc instead.

Problem	Reason	Solution
The sound skips when an audio file is being played.	The disc is scratched or dirty.	Clean the disc. See *Precautions on handling discs (P.4)*.
	The recording condition is bad.	Record the file again or use another disc.
Video or audio is interrupted on Streaming Video and AUPEO!	The communication environment is not stable.	Video or audio may be interrupted depending on the communication environment and this unit's operation condition.
	Video or audio is playing in the background.	

Other

Problem	Reason	Solution
The Touch Sensor Tone doesn't sound.	The preout jack is being used.	The Touch Sensor Tone cannot be output from the preout jack.

Error Messages

When you fail to operate the unit correctly, the cause of the failure appears as the message on the screen.

Error Message	Cause	Solution
Protect	Protective circuit has been activated because a speaker cord has shorted or it has come in contact with the car chassis.	Wire or insulate the speaker cord as appropriate and then press the <Reset> button *(P.157)*.
Hot Error	When the internal temperature of this unit rises to 60°C or more, the protection circuit is activated and you may not be able to operate the unit.	Use the unit again after reducing the temperature of the unit.
Mecha Error	The disc player is malfunctioning.	Eject the disc and try inserting it again. Contact the Kenwood dealer if this indicator continues blinking or the disc cannot be ejected.
Disc Error	An unplayable disc is inserted.	Change the disc. See *Playable Media and Files (P.158)*.
Read Error	The disc is quite dirty.	Clean the disc. See *Precautions on handling discs (P.4)*.
	Disc is upside down.	Load the disc with the labeled side up.
Region Code Error	The disc you wanted to play has a region code that cannot be played with this unit.	See *Region Codes in the World (P.163)* or try another disc.
Parental Level Error	The disc you wanted to play has a higher level than the parental level you set.	Set the parental level. See *Parental level (P.67)*.

Error Message	Cause	Solution
Error 07–67	The unit is not operating correctly due to some reason or other.	Push the unit's Reset button. If the "Error 07–67" message does not disappear, see your nearest Kenwood dealer.
No Device (USB device)	The USB device is selected as a source although no USB device is connected.	Change the source to any source other than USB/iPod. Connect a USB device, and change the source to USB again.
Disconnected (iPod, Bluetooth audio player)	The iPod/Bluetooth audio player is selected as a source although no iPod/Bluetooth audio player is connected.	Change the source to any source other than iPod/Bluetooth. Connect an iPod/Bluetooth audio player, and change the source to iPod/Bluetooth again.
No Media file	The connected USB device contains no playable audio file. Media was played that doesn't have data recorded that the unit can play.	See ***Playable Media and Files (P.158)*** and try another USB device.
USB Device Error!!	The connected USB device is rated a current capacity higher than the allowable limit.	Check the USB device. Some trouble may have occurred to the connected USB device.
		Change the source to any source other than USB. Remove the USB device.
Authorization Error	Connection to the iPod has failed.	• Remove the iPod and then reconnect it. • The unit does not support the iPod. See ***Connectable iPod/iPhone (P.160)***.
Update your iPod	The iPod's software is an older version which the unit can not support.	The unit may not support the connected iPod model. Confirm that the software for the iPod is the latest version. See ***Connectable iPod/iPhone (P.160)***.
Navigation Error. Please turn on power again later.	The communication error has occurred due to severely cold temperature.	Turn on power again after warming your car interior.
Network is disconnected	Not connected to Wi-Fi.	Connect to Wi-Fi.
Your Dropbox and Kenwood accounts are not linked.	Dropbox account information is not registered to the logged in Owner or User account.	Log in Route Collector site and register the Dropbox account

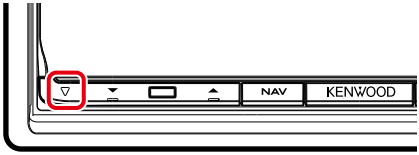
SiriusXM

Error Message	Cause	Solution
Check Tuner	A SiriusXM tuner is not connected to this navigation system.	Check the connection to the SiriusXM tuner.
Subscription Updated - Press Return To Continue	The SiriusXM subscription has been renewed.	Touch [⮌] to clear the error message.
Channel Not Available	The currently selected channel is unavailable.	—
Ch Unsubscribed	The currently selected channel is not subscribed to.	—
Check Antenna	No antenna is connected to the SiriusXM tuner.	Check that an antenna is connected to the SiriusXM tuner.
No Signal	No SiriusXM radio signal is received.	—

Resetting the Unit

If the unit or the connected device fails to operate properly, reset the unit.

1 Press the <Reset> button.
The unit returns to factory settings.



NOTE

- Disconnect the USB device before pressing the <Reset> button. Pressing the <Reset> button with the USB device connected can damage the data stored in the USB device. For how to disconnect the USB device, see ***How to Play Media (P.18)***.
- When the unit is turned on after resetting, the Initial SETUP screen appears. See ***Initial setup (P.14)***.

Appendix

Playable Media and Files

You can play various kinds of media and files on this unit.

List of playable discs

Disc types	Standard	Support	Remark
DVD	DVD Video	○	
	DVD Audio	×	
	DVD-VR	×	
	DVD-R*1	○	• MP3/WMA/AAC/MPEG1/MPEG2/DivX playback • Multi-border/Multisession playback (Playback depends on authoring conditions)
	DVD-RW	○	
	DVD+R	○	
	DVD+RW	○	
	DVD-R DL (Dual layer)	○	Only video format
	DVD+R DL (Double layer)	○	
	DVD-RAM	×	
CD	Music CD*1	○	CD-TEXT
	CD-ROM	○	• MP3/WMA/AAC/MPEG1/MPEG2/DivX playback • Multisession is supported. • Packet write is not supported.
	CD-R	○	
	CD-RW	○	
	DTS-CD	×	
	Video CD (VCD)	○	
	Super video CD	×	
	Photo CD	×	
	CD-EXTRA	△	Only music CD session can be played.
	HDCD	○	
	CCCD	×	
Others	Dualdisc	×	
	Super audio CD	△	Only CD layer can be played.

*1 Incompatible with 8 cm (3 inch) discs.

○ : Playback is possible.
△ : Playback is partly possible.
× : Playback is impossible.

NOTE

- When buying DRM enabled content, check the Registration Code in the *DivX® VOD (P.87)*. Each time a file with the displayed code is played and protected against copying, the code changes.
- DivX can be played only from a DVD disc media.

● Use of DualDisc

When playing a "DualDisc" on this unit, the surface of the disc that is not played may be scratched while the disc is inserted or ejected. Since the music CD surface does not conform to the CD standard, playback may be impossible.

(A "DualDisc" is a disc with one surface containing DVD standard signals and the other surface containing music CD signals.)

● About disc format

The disc format should be the one of the following.

- ISO 9660 Level 1/2
- Joliet
- Romeo
- Long file name

About files

The following audio, video, and picture files are supported.

● Audio files

- AAC-LC (.m4a)
- MP3 (.mp3)
- WMA (.wma)
- Linear PCM (WAVE) (.wav)
  *Mass-storage-class USB device only
- FLAC (.flac)
  *Mass-storage-class USB device only

NOTE

- If music of normal CD and other playback systems are recorded in the same disc, only the playback system recorded at the first setout is played.
- WMA and AAC of which is covered with DRM cannot be played.
- Although the audio files are complied with the standards listed above, the play may be impossible depending on the types or conditions of media or device.
- An online manual about audio files is posted on the site, ***www.kenwood.com/cs/ce/audiofile/***. On this online manual, detailed information and notes which are not written in this manual are provided. Make sure to read through the online manual as well.

● Video files

- MPEG1 (.mpg, .mpeg, .m1v)
- MPEG2 (.mpg, .mpeg, .m2v)
- DivX (.divx, .div, .avi)
  *Only for DVD
- H.264/MPEG-4 AVC (.mp4, .m4v)
  *Mass-storage-class USB device only
- WMV 9 (.wmv, .m2ts)
  *Mass-storage-class USB device only
- MKV (.mkv)
  *Mass-storage-class USB device only

● Picture files

Only picture files in USB device can be displayed.

Files stored in disc media is not supported.

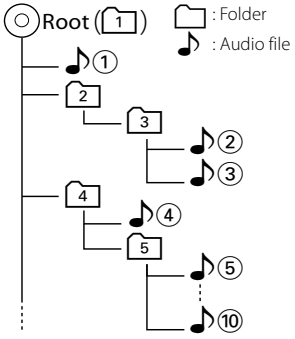
- JPEG (.jpg, .jpeg)
- PNG (.png)
- BMP (.bmp)

NOTE

- BMP and PNG can be set only as wallpaper.

● Playing order of files

In the example of folder/file tree shown below, the files are played in the order from ① to ⑩.



Connectable iPod/iPhone

The following models can be connected to this unit.

Made for

- iPhone 5
- iPhone 4S
- iPhone 4
- iPhone 3GS
- iPhone 3G
- iPhone
- iPod touch (5th generation)
- iPod touch (4th generation)
- iPod touch (3rd generation)
- iPod touch (2nd generation)
- iPod touch (1st generation)
- iPod classic
- iPod with video
- iPod nano (7th generation)
- iPod nano (6th generation)
- iPod nano (5th generation)
- iPod nano (4th generation)
- iPod nano (3rd generation)

NOTE

- For the details of the necessary cable and adapter to connect with iPod/iPhone, refer to *Music/ Video Basic Operation (P.68)*.
- For the conformity information on iPod/iPhone software, access *www.kenwood.com/cs/ce/ipod/*.
- By connecting your iPod/iPhone to this unit with an optional accessory iPod connection cable (KCA-iP202 or KCA-iP102), you can supply power to your iPod/iPhone as well as charge it while playing music. However, the power of this unit must be on.
- If you start playback after connecting the iPod, the music that has been played by the iPod is played first.
  In this case, "Reading" is displayed without displaying a folder name, etc. Changing the browse item will display a correct title, etc.
- When the iPod is connected to this unit, "KENWOOD" or "✓" is displayed on the iPod to indicate that you cannot operate the iPod.

Usable USB device

You can use a mass-storage-class USB device on this unit.

The word "USB device" appearing in this manual indicates a flash memory device and digital audio players can be recognized as mass-storage.

● About file system

The file system should be the one of the following.

- FAT16
- FAT32

NOTE

- When the USB device is connected to this unit, it can be charged through the USB cable.
- Install the USB device in the place where it will not affect safe driving.
- You cannot connect a USB device via a USB hub and Multi Card Reader.
- Take backups of the audio files used with this unit. The files can be erased depending on the operating conditions of the USB device.
  We shall have no compensation for any damage arising from any erased data.
- No USB device comes with this unit. You need to purchase a commercially available USB device.
- When connecting the USB device, usage of the CA-U1EX (option) is recommended. (However, maximum supply current of CA-U1EX is 500mA.) Normal playback is not guaranteed when a cable other than the USB compatible cable is used.

Usable SD card (DNN991HD)

The unit is capable of playback of SD/SDHC memory cards complying with the SD or SDHC standard.

A special adapter is required to use a miniSD card, miniSDHC card, microSD card or microSDHC card.

The MultiMedia Card (MMC) cannot be used.

Status Bar Indicator Items

Shown below is a list of indicators displayed on the status bar in the screen.
Current status of this unit is displayed on the bar.

● General

ATT
The attenuator is active.

DUAL
The dual zone function is on.

TEL
Indicates the connection state of the Bluetooth hands-free unit.
- White: Connected
- Orange: Not connected

LOUD
The loudness control function is on.

● DVD/CD

FO-REP
Folder repeat function is on.

IN
A disc is inserted.
- White: A Disc is inside the unit.
- Orange: Error at the disc player

VIDEO
Identifies the video file.

MUSIC
Identifies the music file.

RDM
The random function is on.

REP
The repeat function is on.

C-REP
The chapter repeat function is on.

T-REP
The title repeat function is on.

● VCD

1chLL/2chLL
Identifies the left audio output of channel 1 or 2.

1chLR/2chLR
Identifies the monaural audio output of channel 1 or 2.

1chRR/2chRR
Identifies the right audio output of channel 1 or 2.

1chST/2chST
Identifies the stereo audio output of channel 1 or 2.

LL
Identifies the left audio output.

LR
Identifies the monaural audio output.

RR
Identifies the right audio output.

STEREO
Identifies the stereo audio output.

PBC
The PBC function is on.

SVCD
Identifies the Super Video CD.

VER1
The VCD version is 1.

VER2
The VCD version is 2.

REP
The repeat function is on.

● USB SD

FO-REP
The folder repeat function is on.

VIDEO
Identifies the video file.

MUSIC
Identifies the music file.

RDM
The random function is on.

REP
The repeat function is on.

PLST
The play list mode is selected now.

● iPod

MUSIC
Identifies the music file.

VIDEO
Identifies the video file.

RDM
The random function is on.

A-RDM
The album random function is on.

REP
The repeat function is on.

● Tuner

AUTO1
Seek mode is set to AUTO1.

AUTO2
Seek mode is set to AUTO2.

MANUAL
Seek mode is set to MANUAL.

ST
A stereo broadcast is being received.

TI
Indicates the reception state of traffic information.

- White: TP is being received.
- Orange: TP is not being received.

● HD Radio reception

AUTO1
Seek mode is set to AUTO1.

AUTO2
Seek mode is set to AUTO2.

MANU
Seek mode is set to MANUAL.

HD
HD Radio station is being received.

ANALOG
An analog broadcast is being received.

DIGITAL
A digital broadcast is being received.

ST
A stereo broadcast is being received.

TI
Indicates the reception state of traffic information.

- White: TP is being received.
- Orange: TP is not being received.

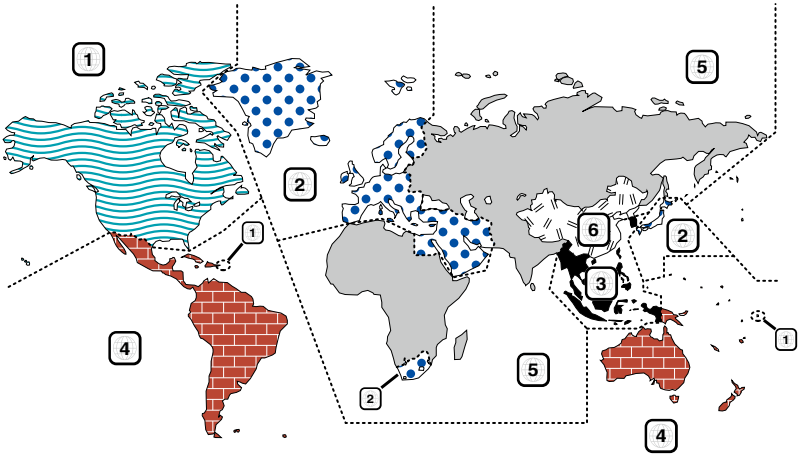
● SiriusXM

SEEK1
Seek mode is set to SEEK1.

SEEK2
Seek mode is set to SEEK2.

Region Codes in the World

The DVD players are given a region code according to the country or area it is marketed, as shown in the following map.



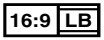
● DVD disc marks

Indicates a region number. The discs with this mark can be played with any DVD player.

Indicates the number of audio languages recorded. Up to 8 languages can be recorded in a movie. You can select a favorite language.

Indicates the number of subtitled languages recorded. Up to 32 languages can be recorded.

If a DVD disc has scenes shot from multiple angles, you can select a favorite angle.



Indicates the type of screen for the image. The left mark indicates that a wide image picture (16:9) is displayed on a standard TV set screen (4:3) with a black band at both the top and bottom of the screen (letter box).

● Operation regulatory marks

With this DVD, some functions of this unit such as the play function may be restricted depending on the location where the DVD is playing. In this case, the following marks will appear on the screen. For more information, refer to the disc manual.

● Discs with limited period of use

Do not leave discs with a limited period of use in this unit. If you load an already expired disc, you may not be able to remove it from this unit.

DVD Language Codes

Code	Language
aa	Afar
ab	Abkhazian
af	Afrikaans
am	Amharic
ar	Arabic
as	Assamese
ay	Aymara
az	Azerbaijani
ba	Bashkir
be	Byelorussian
bg	Bulgarian
bh	Bihari
bi	Bislama
bn	Bengali, Bangla
bo	Tibetan
br	Breton
ca	Catalan
co	Corsican
cs	Czech
cy	Welsh
da	Danish
de	German
dz	Bhutani
el	Greek
en	English
eo	Esperanto
es	Spanish
et	Estonian
eu	Basque
fa	Persian
fi	Finnish
fj	Fiji
fo	Faroese
fr	French
fy	Frisian
ga	Irish
gd	Scots Gaelic
gl	Galician
gn	Guarani
gu	Gujarati
ha	Hausa
he	Hebrew
hi	Hindi
hr	Croatian
hu	Hungarian
hy	Armenian

Code	Language
ia	Interlingua
ie	Interlingue
ik	Inupiak
id	Indonesian
is	Icelandic
it	Italian
ja	Japanese
jv	Javanese
ka	Georgian
kk	Kazakh
kl	Greenlandic
km	Cambodian
kn	Kannada
ko	Korean
ks	Kashmiri
ku	Kurdish
ky	Kirghiz
la	Latin
lb	Luxembourgish
ln	Lingala
lo	Laotian
lt	Lithuanian
lv	Latvian, Lettish
mg	Malagasy
mi	Maori
mk	Macedonian
ml	Malayalam
mn	Mongolian
mo	Moldavian
mr	Marathi
ms	Malay
mt	Maltese
my	Burmese
na	Nauru
ne	Nepali
nl	Dutch
no	Norwegian
oc	Occitan
om	(Afan) Oromo
or	Oriya
pa	Punjabi
pl	Polish
ps	Pashto, Pushto
pt	Portuguese
qu	Quechua
rm	Rhaeto-Romance

Code	Language
rn	Kirundi
ro	Romanian
ru	Russian
rw	Kinyarwanda
sa	Sanskrit
sd	Sindhi
sg	Sangho
sh	Serbo-Croatian
si	Singhalese
sk	Slovak
sl	Slovenian
sm	Samoan
sn	Shona
so	Somali
sq	Albanian
sr	Serbian
ss	Siswati
st	Sesotho
su	Sundanese
sv	Swedish
sw	Swahili
ta	Tamil
te	Telugu
tg	Tajik
th	Thai
ti	Tigrinya
tk	Turkmen
tl	Tagalog
tn	Setswana
to	Tongan
tr	Turkish
ts	Tsonga
tt	Tatar
tw	Twi
uk	Ukrainian
ur	Urdu
uz	Uzbek
vi	Vietnamese
vo	Volapuk
wo	Wolof
xh	Xhosa
yo	Yoruba
zh	Chinese
zu	Zulu

Specifications

● Monitor section

Picture Size
: 6.95 inches (diagonal) wide
: 156.6 mm (W) x 81.6 mm (H)
6-3/16 x 3-3/16 inch

Display System
: Transparent TN LCD panel

Drive System
: TFT active matrix system

Number of Pixels
: 1,152,000 (800H x 480V x RGB)

Effective Pixels
: 99.99 %

Pixel Arrangement
: RGB striped arrangement

Back Lighting
: LED

● DVD player section

D/A Converter
: 24 bit

Audio Decoder
: Linear PCM/Dolby Digital/MP3/WMA/AAC

Video Decoder
: MPEG1/ MPEG2/ DivX

Wow & Flutter
: Below Measurable Limit

Frequency Response
- 96 kHz : 20 – 20,000 Hz
- 48 kHz : 20 – 20,000 Hz
- 44.1 kHz : 20 – 20,000 Hz

Total Harmonic Distortion
: 0.008 % (1 kHz)

S/N Ratio (dB)
: 90 dB (DVD-Video 96 kHz)

Dynamic Range
: 91 dB (DVD-Video 96 kHz)

Disc Format
: DVD-Video/ VIDEO-CD/ CD-DA

Sampling Frequency
: 44.1/48/96 kHz

Quantifying Bit Number
: 16/20/24 bit

● USB interface section

USB Standard
: USB 2.0 Full/ High speed

File System
: FAT 16/ 32

Maximum Power Supply Current
iPod/iPhone: DC 5 V ⎓ 1 A
USB: DC 5 V ⎓ 500 mA

D/A Converter
: 24 Bit

Video Decoder
: MPEG1/MPEG2/MPEG4/WMV/H.264

Audio Decoder
: MP3/ WMA/ AAC/ WAV/ FLAC

● SD (DNN991HD)

SD Standard
: SD/ SD-HC

Compatible File System
: FAT 16/32

Capacity
: Maximum 32G Byte

Data Transfer Rate
: Maximum 24MB/sec

Video Decoder
: MPEG1/MPEG2/MPEG4/WMV/H.264

Audio Decoder
: MP3/ WMA/ AAC/ WAV/ FLAC

● Network section

uPnp
: Media Controller/Media Server/Media player/Media Renderer

Video Decoder
: MPEG1/MPEG2/MPEG4/WMV/H.264

Audio Decoder
: MP3/ WMA/ AAC/ WAV/ FLAC

● Wi-Fi section

IEEE Standard
: 802.11b/g/n

Security Support
: 64/128bit WEP / WPA & WPA2

Frequency Range
DNN991HD: 2.401 – 2.473 GHz
DNN9710BT: 2.401 – 2.483 GHz

Transfer rates (MAX)
DNN991HD
QAU0568: 802.11n(130 Mbps) / 802.11g(54 Mbps) / 802.11b(11 Mbps)
W02-5613: 802.11n(150 Mbps) / 802.11g(54 Mbps) / 802.11b(11 Mbps)
DNN9710BT
802.11n(130 Mbps) / 802.11g(54 Mbps) / 802.11b(11 Mbps)

Output Power
DNN991HD
QAU0568: DSSS: 15 – 18dBm,
OFDM (11g): 13 – 17dBm,
OFDM (11n): 11 – 15dBm
W02-5613: 16 – 18dBm (CCK),
13 – 15dBm (OFDM)
DNN9710BT
: DSSS: 15 – 18dBm,
OFDM (11g): 13 – 17dBm, OFDM (11n): 11 – 15dBm

● Bluetooth section

Technology
: Bluetooth Ver3.0+EDR

Frequency
: 2.402 – 2.480 GHz

Output Power
: +4dBm (MAX), 0dBm (AVE), Power Class2

Maximum Communication Range
: Line of sight approx. 10m (32.8 ft)

Audio Codec
SBC/ AAC/ MP3/ aptX

Profile
- HFP (V1.6) (Hands Free Profile)
- SPP (Serial Port Profile)
- SDP (Service Discovery Profile)
- A2DP (Advanced Audio Distribution Profile)
- AVRCP (Audio/Video Remote Control Profile)
- PBAP (Phonebook Access Profile)
- GAP (Generic Access Profile)
- Multi Profile support

● HDMI/ MHL section

HDMI
: HDMI Type-A

MHL Supported Version
: MHL 2

MHL Maximum Power Supply Current
: DC 5 V ⎓ 900 mA

● DSP section

Graphics equalizer
Band: 13 Band
Frequency (BAND1 – 13)
: 62.5/100/160/250/400/630/1k/1.6k/2.5k/4k/6.3k/10k/16k Hz

Gain
: -9/-8/-7/-6/-5/-4/-3/-2/-1/0/1/2/3/4/5/6/7/8/9 dB

X'over
Front/ Rear High pass filter
Frequency: Through, 30/ 40/ 50/ 60/ 70/ 80/ 90/ 100/ 120/ 150 / 180/ 220/ 250 Hz
Slope: -6/-12/-18/-24 dB/Oct.
Subwoofer Low pass filter
Frequency: 30/ 40/ 50/ 60/ 70/ 80/ 90/ 100/ 120/ 150/ 180/ 220/ 250 Hz, Through
Slope: -6/-12/-18/-24 dB/Oct.

Position
Front / Rear /Subwoofer Delay
: 0 – 20.0ft (0.07ft Step)
Gain
: -8 – 0 dB

Subwoofer level
: -50 – +10 dB

● Digital FM tuner section (DNN991HD)

Frequency Range
: 87.9 MHz – 107.9 MHz (200 kHz)

Frequency Response (± 3.0 dB)
: 20 Hz – 20 kHz

S/N Ratio (dB)
: 75 dB (STEREO)

● Digital AM tuner section (DNN991HD)

Frequency Range (10 kHz)
: 530 kHz – 1700 kHz

Frequency Response (± 3.0 dB)
: 40 Hz – 15 kHz

S/N Ratio (dB)
: 75 dB (STEREO)

● FM tuner section

Frequency Range
DNN991HD : 87.9 MHz – 107.9 MHz (200 kHz)
DNN9710BT : 87.5 MHz – 108.0 MHz (50 kHz)

Usable Sensitivity (S/N : 30 dB)
DNN991HD : 7.2 dBf (0.8 µV/75 Ω)
DNN9710BT : 0.63 µV/75 Ω

Quieting Sensitivity (S/N : 50 dB)
DNN991HD : 10.2 dBf (1.13 µV/75 Ω)
DNN9710BT : 15.2 dBf (1.6 µV/75 Ω)

Frequency Response (± 3.0 dB)
: 30 Hz – 15 kHz

S/N Ratio (dB)
: 75 dB (MONO)

Selectivity (± 400 kHz)
: ≥ 80 dB

Stereo Separation
: 45 dB (1 kHz)

● AM tuner section

Frequency Range (10 kHz)
: 530 kHz – 1700 kHz

Usable Sensitivity
: 28 dBµV

● Video section

Color System of External Video Input
: NTSC/PAL

External Video Input Level (RCA jacks)
: 1 Vp-p/ 75 Ω

External Audio Max Input Level (RCA jacks)
: 2 V/ 25 kΩ

Video Input Level (RCA jacks)
: 1 Vp-p/ 75 Ω

Video Output Level (RCA jacks)
: 1 Vp-p/ 75 Ω

Audio Output Level (Mini jack)
: 1.2 V/ 10 kΩ

● Audio section

Maximum Power (Front & Rear)
: 50 W x 4

Full Bandwidth Power (Front & Rear) (4 Ω, 14.4 V, 1 % THD)
: 22 W x 4

Preout Level (V)
: 5 V/ 10 kΩ

Preout Impedance
: ≤ 250 Ω

Speaker Impedance
: 4 – 8 Ω

● External SW

Maximum Power Supply Current
: 500 mA

● Navigation section

Receiver
: High-sensitivity GPS receiver

Reception Frequency
: 1575.42 MHz (C/A code)

Acquisition Times
Cold : 29 seconds (typ)
(All satellites at -130 dBm Without aiding)

Update Rate
: 1/second, continuous

Accuracy
Position: <2.5 meters, CEP, at -130 dBm
Velocity: 0.1 meter/sec RMS

Position Method
: GPS

Antenna
: External GPS antenna

● General

Operating Voltage
: 14.4 V (10.5 – 16 V allowable)

Maximum Current Consumption
: 10 A

Installation Dimensions (W × H × D)
: 181.7 × 112.3 × 163 mm
7-2/16 × 4-6/16 × 6-7/16 inch

Operational Temperature Range
: -10 °C – +60 °C

Weight
: 2.5 kg (5.5 lbs)

NOTE

- Although the effective pixels for the liquid crystal panel is given as 99.99% or more, 0.01% of pixels may not light or may light incorrectly.

Specifications subject to change without notice.

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- **Requirements Pandora®:**
  Requirements for listening to the Pandora® are as follows:
  - A smartphone with the latest Pandora application installed.
  - A Pandora account (if you do not have an account, create one for free using the mobile app or on www.pandora.com).
  - An active internet connection.

  iPhone or iPod touch
  - Apple iPhone or iPod touch with iOS 3 or later installed.
  - Latest version of the Pandora application (search App Store for Pandora and install).

  Android™
  - Latest version of the Pandora Android application (search Google Play for Pandora and install).

  BlackBerry®
  - Visit www.pandora.com from the built in browser to download the Pandora application.
  - Bluetooth must be built in and the following profiles must be supported.
    – SPP (Serial Port Profile)
    – A2DP (Advanced Audio Distribution Profile)

  Note
  - Pandora® is available only in the U.S, Australia and New Zealand.
  - Because Pandora® is a third-party service, the specifications are subject to change without prior notice. Accordingly, compatibility may be impaired or some or all of the services may become unavailable.
  - Some functions of Pandora® cannot be operated from this unit.
  - For issues using the application, please contact Pandora® at pandora-support@pandora.com

- **Requirements iHeartRadio™:**
  Requirements for listening to iHeartRadio are as follows:
  - In the application on your device, log in and create a free account with iHeartRadio.
  - An active internet connection.

  Note
  - Because iHeartRadio™ is a third-party service, the specifications are subject to change without prior notice. Accordingly, compatibility may be impaired or some or all of the services may become unavailable.
  - Some iHeartRadio™ functionality cannot be operated from this unit.

Safety precaution

● FCC WARNING

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment may cause harmful interference to radio communications, if it is not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

⚠CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

JVC KENWOOD Corporation
2967-3, ISHIKAWA-MACHI,
HACHIOJI-SHI, TOKYO, JAPAN

THIS PRODUCT COMPLIES WITH DHHS RULES 21 CFR SUBCHAPTER J IN EFFECT AT DATE OF MANUFACTURE.

Location: Top plate

● IC (Industry Canada) Notice

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

(1)This device may not cause interference, and
(2)this device must accept any interference, including interference that may cause undesired operation of the device.

The term "IC: " before the certification/ registration number only signifies that the Industry Canada technical specification were met.

⚠CAUTION

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated keeping the radiator at least 20cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

- Contains Transmitter Module
FCC ID : YZP-RBFAC21XX
- Contains Transmitter Module
IC: 7414A-RBFAC21XX

DNN9710BT :

● The marking of products using lasers

CLASS 1
LASER PRODUCT

The label is attached to the chassis/case and says that the component uses laser beams that have been classified as Class 1. It means that the unit is utilizing laser beams that are of a weaker class. There is no danger of hazardous radiation outside the unit.

● Información acerca de la eliminación de equipos eléctricos y electrónicos al final de la vida útil (aplicable a los países que hayan adoptado sistemas independientes de recogida de residuos)

Los productos con el símbolo de un contenedor con ruedas tachado no podrán ser desechados como residuos domésticos.

Los equipos eléctricos y electrónicos al final de la vida útil, deberán ser reciclados en instalaciones que puedan dar el tratamiento adecuado a estos productos y a sus subproductos residuales correspondientes. Póngase en contacto con su administración local para obtener información sobre el punto de recogida más cercano. Un tratamiento correcto del reciclaje y la eliminación de residuos ayuda a conservar los recursos y evita al mismo tiempo efectos perjudiciales en la salud y el medio ambiente.

● Para cumplimiento de la COFETEL:

"La operación de este equipo esta sujeta a las siguientes dos condiciones:

(1) es posible que este equipo o dispositivo no cause interferencia perjudicial y

(2) este equipo o dispositivo debe aceptar cualquier interferencia,

incluyendo la que pueda causar su operación no deseada."

● Informação sobre a eliminação de pilhas

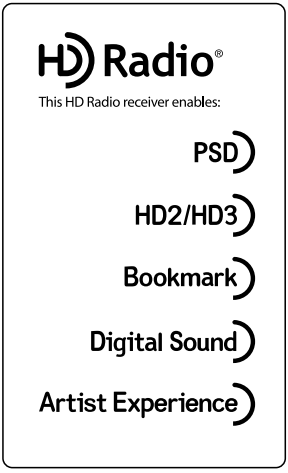
Este produto não deve ser eliminado como lixo doméstico geral. Devolva a pilha usada ao revendedor ou entidade autorizada para que a mesma seja devolvida ao fabricante ou importador.

A reciclagem e a eliminação de lixo de maneira apropriada ajudarão a conservar os recursos naturais ao mesmo tempo que prevenirão os efeitos prejudicais à nossa saúde e ao meio ambiente.

About QAU0568, W02-5613 (USB Wi-Fi® Adapter) (DNN991HD)

About QAU0569 (USB Wi-Fi® Adapter) (DNN9710BT)

The Wi-Fi Adapter is attached to this unit when shipped from the factory. When the adapter is removed, store it in a safe place.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This HD Radio receiver enables:
PSD
HD2/HD3
Bookmark
Digital Sound
Artist Experience

Wi Fi
CERTIFIED
HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE
MHL
Mobile High-Definition Link

DVD VIDEO
DOLBY DIGITAL
DIVX
SDHC

Bluetooth®
iHeartRADIO
SiriusXM
READY

Made for
iPod
iPhone
Designed for
Windows Media™
Works With
PANDORA®
apt X®
CSR

KENWOOD

KENWOOD

CONNECTED NAVIGATION SYSTEM

DNN991HD
DNN9250DAB

Voice Command Table

JVC KENWOOD Corporation

14DNN_IM383_VoiceCommand_en_00 (K/E)

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General opreration

Screen	Operation	Voice Command			
		US English	UK English	French	German
Any screen	Canceling the voice control mode	Cancel	Cancel	Annuler	Abbr.
	Displays the Top Menu screen	Top menu	Top menu	Menu sup	Hauptmenü
	Switches to DAB source *1	DAB	DAB	DAB	DAB
	Switches to Wireless Link source	Wireless Link	Wireless Link	Wireless Link	Wireless Link
	Switches to DVD source	DVD	DVD	DVD	DVD
	Switches to HD Radio source *2	HD Radio	HD Radio	Radio HD	HD Radio
	Switches to iPod source	iPod	iPod	iPod	iPod
	Switches to Bluetooth Audio source	Bluetooth audio	Bluetooth audio	Audio Bluetooth	Bluetooth audio
	Switches to SiriusXM source *2	SiriusXM	SiriusXM	SiriusXM	SiriusXM
	Switches to STANDBY source	Standby	Standby	Veille	Standby
	Switches to Cloud Storage source	Storage	Storage	Storage	Storage
	Switches to Tuner source *1	Tuner	Tuner	Tuner	Tuner
	Switches to USB source	USB	USB	USB	USB
	Switches to Pandora source *2	Pandora	Pandora	Pandora	Pandora
	Switches to AUPEO! source	AUPEO!	AUPEO!	AUPEO!	AUPEO!
	Switches to iHeart Radio source *2	iHeart Radio	iHeart Radio	iHeart Radio	iHeart Radio
	Switches to Streaming Video source	Streaming Video	Streaming Video	Streaming Video	Streaming Video
	Switches to APPS source	Apps	Apps	Apps	Apps
	Switches to HDMI source	HDMI	HDMI	HDMI	HDMI
		MHL	MHL	MHL	MHL
	Switches the AV OUT source	AV out	AV out	sortie AV	AV out
	Displays Hands Free screen	Hands free	Hands free	Mains libres	Telefon
	Switches to Mixed Media Search	Media Search	Media Search	Media Search	Media Search
	Switches to Phone Search	Phone Search	Phone Search	Phone Search	Phone Search
	Displays OEM Features screen *2	OEM	OEM	OEM	OEM
	Displays the view from the Front View camera	Front camera	Front camera	Caméra avant	Frontkamera
	Displays the view from the Rear View camera	Rear camera	Rear camera	Caméra arrière	Rückfahrkamera
	Displays Current Source Control screen	Control screen	Control screen	Écran de commande	Steuerbildschirm
	Searches the previous station/channel.	Seek down	Seek down	Rechercher vers le bas	Suche abwärts
	Searches the next station/channel.	Seek up	Seek up	Rechercher vers le haut	Suche aufwärts
	Searches the previous track/file.	Track down	Track down	Piste précédente	Titel abwärts
	Searches the next track/file.	Track up	Track up	Piste suivante	Titel aufwärts
	Switches to RSS Application	RSS	RSS	RSS	RSS
	Switches to Weather Application	Weather	Weather	Météo	Wetter
	Switches to Facebook in SNS Application	Facebook	Facebook	Facebook	Facebook
	Create a Facebook Status in SNS Application	Status	Status	Statut	Status
	Switches to Twitter in SNS Application	Twitter	Twitter	Twitter	Twitter
	Create a Tweet in SNS Application	Tweet	Tweet	Tweet	Twitter-Nachricht
	Switches to Gmail in SNS Application	Mail	Mail	Message	Email
	Posting the current place.	I'm Here	I'm Here	Je suis ici	Mein Standort
	Posting the information about the song you are listening to.	I'm Listening	I'm Listening	J'écoute	Ich höre gerade
	Switches to Schedule Application	Schedule	Schedule	Agenda	Kalender
	Displays the Current Location Information	View Map	View Map	View Map	View Map

	Dutch	Italian	Spanish
	Terug	Annulla	Cancelar
	Hoofdmenu	Menu princ.	Menú superior
	DAB	DAB	DAB
	Wireless Link	Wireless Link	Wireless Link
	DVD	DVD	DVD
	HD Radio	HD Radio	HD Radio
	iPod	iPod	iPod
	Bluetooth audio	Audio Bluetooth	Audio Bluetooth
	SiriusXM	SiriusXM	SiriusXM
	Stand by	Attesa	En espera
	Storage	Storage	Storage
	Tuner	Radio	Sintonizador
	USB	USB	USB
	Pandora	Pandora	Pandora
	AUPEO!	AUPEO!	AUPEO!
	iHeart Radio	iHeart Radio	iHeart Radio
	Streaming Video	Streaming Video	Streaming Video
	Apps	Apps	Apps
	HDMI	HDMI	HDMI
	MHL	MHL	MHL
	AV uit	AV out	salida AV
	Handsfree	Vivavoce	Manos libres
	Media Search	Media Search	Media Search
	Phone Search	Phone Search	Phone Search
	OEM	OEM	OEM
	Vooruitzicht camera	Telecamera frontale	Cámara delantera
	Camera achter	Retrocamera	Cámara trasera
	Scherm besturen	Scherm. di controllo	Pantalla de control
	Omlaag zoeken	Ricerca giù	Buscar anterior
	Omhoog zoeken	Ricerca su	Buscar siguiente
	Track omlaag	Traccia giù	Pista anterior
	Track omhoog	Traccia su	Pista siguiente
	RSS	RSS	RSS
	weer	Tempo	tiempo
	Facebook	Facebook	Facebook
	status	Stato	Estatus
	Twitter	Twitter	Twitter
	Tweet	Tweet	Tweet
	E-mail	Mail	Correo
	Ik ben hier	Ci sono	Estoy aquí
	Ik luister	In ascolto	Escucho
	Rooster	Programm	Programa
	View Map	View Map	View Map

Displaying Voice Commands

The available voice commands depend on each screen and you can find them by pressing and holding the Push-To Talk switch.

1 Press and hold the Push-To-Talk switch.

The list of operable voice commands appears.
Pronounce a command.

Note

- About the voice command for navigation system, refer to the instruction manual of the navigation system.
- *1 DNN9250DAB only
- *2 DNN991HD only